

Appendix L.
Conceptual Cost Estimates

Alternatives Analysis Cost Methodology and Assumptions

The construction costs estimates based on the conceptual design presented in this appendix are order-of magnitude cost comparisons of the different design options and do not represent total costs for the project. The conceptual cost estimates are based on the various vertical options shown in Appendix B and the unit prices from the 2009 Business Plan. The cost for ROW is identified qualitatively (high, medium, or low); estimated ROW needs and costs are being developed for options in the 15% engineering design effort.

Basis of Estimate

These estimates have been prepared based on the following:

- Unit costs from 2009 business plan (2009 dollars)
- Preliminary profiles shown on the 500-scale plans included as Appendix B
- Costs broken down by major Subsections 0-9, and then by sub-subsections as depicted on the 500-scale plans
- Costs have been developed for the following options:
 - Aerial Viaduct
 - Berm (Embankment or MSE – mechanically stabilized earth)
 - At-Grade
 - Open Trench
 - Covered Trench/Tunnel
 - Deep Tunnel
- ROW costs identified qualitatively as Low, Medium or High
- System wide elements such as Traction Power, Overhead Contact System, Communications, Signaling assumed to be equal for all options
- Costs for reconfiguration of existing Caltrain stations included
- 4-track fully grade separated shared use system assumed
- Costs for HST stations at Millbrae and San Jose included
- Costs for potential Mid-Peninsula HST station not included
- Maintenance facility not included
- Temporary construction easements (TCE) not included
- Contingency of 25% is included

Definitions/Assumptions

- Aerial Viaduct – Elevated structure on columns crossing over existing streets to provide grade separated access.
- Berm – Earthen elevated berm with slopes conforming back to surrounding grade, or mechanically stabilized earth (MSE) walls. Grade separation accomplished by structures spanning the roadways.
- At-Grade – Grade separations requiring streets to go either over or under tracks that remain at existing Caltrain grade. ROW impacts account for parcels affected by changes to the roadway profile approaching the grade separation.
- Open Trench – Shallow open box bridged at street crossings and drainage channels or streams. These bridged areas would be approximately 10 feet deep in order to accommodate existing utilities.

- Covered Trench/Tunnel – Shallow covered box generally constructed from the surface down. Fire and life safety systems required. Top of the box approximately 10 feet below existing street level to minimize impacts to existing underground utilities.
- Deep Tunnel – Deep tunnel generally constructed by mining or tunnel boring machine (TBM). Large surface areas needed at the tunnel portals to facilitate construction. Fire and life safety systems required. No HST or Caltrain stations. Option only considered for 2 HST tracks, therefore to develop total cost must add cost to reconstruct Caltrain tracks to achieve the required grade separations. Deep tunnel unit cost is based on construction methodology; soil conditions will dictate actual types of construction.

The use of a vertical option in any given sub-section must be coordinated with the adjacent subsection. Transitions between vertical solutions require approximately 3,000 feet of horizontal distance; the final selected solution must be one that can be “stitched” together without excessive vertical alignment changes. The cost tables are broken down into subsections for options that cover the predominant portion of the subsection. Costs of transitions between vertical options are included within major option types. It is assumed that 4 tracks will be utilized for the entire corridor; to develop total costs for “split” solutions where HST tracks are at one level and Caltrain tracks are at another level requires adding the costs of the options to total 4 tracks. There are notes to that effect in each of the design options where this is a possibility.

These conceptual-level costs are intended to allow a comparative analysis within each subsection between the numerous vertical options that continue to be studied; a more detailed estimate will be developed with the 15% engineering design.

Subsection 0	0A (2.2 miles)	0B (2.2 miles)	0C (1.0 miles)	0D (2.3 miles)
	Covered Trench/ Tunnel	Covered Trench/Tunnel	At Grade	Covered Trench/ Tunnel
Capital Cost (in Millions) does not include ROW	\$3,000 (\$YOE) (Estimate provided by the TJPA, 2010)	\$3,000 (\$YOE) (Estimate provided by the TJPA, 2010)	\$200 (\$YOE)	\$3,000+ (\$YOE)
Acquisition Cost of Permanent ROW	Medium	Medium	Lowest	Highest
Notes:	1. Inclusive of train box and station (in year of expenditure \$) 2. Includes \$100M for reconstruction of 4th & King. 3. Assumed CHSRA contribution of \$1B from CHSRA 2009 Business Plan.	1. Assumed HST contribution of \$1B towards the total construction costs.	1. Based on MTC SF/Silicon Investment Strategy dated June 2009. 2. Assumed costs to be doubled that of the 2 platform option.	1. Inclusive of train box and station (in year of expenditure \$) 2. Includes \$100M for reconstruction of 4th & King. 3. \$3 billion cost based on TTC estimate for 2.2 mile tunnel and terminal.

Subsection 1	1A (0.3 miles)		1B & 1C (1.0 miles)		1D, 1E, 1F & 1G (3.5 miles)	
	At Grade	Covered Trench/ Tunnel	At Grade	Covered Trench/ Tunnel	At Grade	Covered Trench/ Tunnel
Capital Cost (\$2009 in Millions) does not include ROW	\$44 (2 tracks)	\$70 (2 tracks)	\$21 (2 tracks)	\$278 (2 tracks)	\$458 (4 tracks); \$71 (2 tracks)	\$978 (2 tracks)
Acquisition Cost of Permanent ROW	Lowest	Medium	Lowest	Lowest	Highest	Lowest
Notes:	2 tracks - 1. Grade separations at Common St and 16th St; 2. ROW take considers the parcels impacted by new grade separations; 3. Two tracks on existing Caltrain alignment for approach to 4th/King station. <i>Must be combined with 2 track covered trench/tunnel option.</i>	2 tracks - 1. Two tracks on new alignment for approach to TTC; <i>Must be combined with 2 track at grade option.</i> 2. Alignment under 7th St.	2 tracks - 1. Two tracks on existing Caltrain alignment for approach to 4th/King station. <i>Must be combined with 2 track covered trench/tunnel option.</i>	2 tracks - 1. Drilled & blast tunneling method; 2. Two tracks on new alignment for approach to TTC. <i>Must be combined with 2 track at grade option.</i>	4 tracks - 1. Two tracks on existing Caltrain alignment for approach to 4th/King station. 2. Two tracks on new alignment for approach to TTC using combination of tunneling and aerial structures. 3. Caltrain Bayshore Station. 2 tracks - 1. Two tracks on existing Caltrain alignment for approach to 4th/King station. <i>Must be combined with 2 track covered trench/tunnel option.</i> 2. Caltrain Bayshore Station.	2 tracks - 1. Drilled & blast tunneling method; 2. Two tracks on new alignment for approach to TTC. <i>Must be combined with 2 track at grade option.</i>

COST ELEMENTS			UNIT	UNIT PRICE	At-Grade				Tunnel					
Subsection 1				Base: 2009 (3rd Quarter)	A				A					
					Start: 200 + 00	End: 215 + 00	0.28 Miles		Start: 200 + 00	End: 215 + 00	0.28 Miles			
Subsection Details							Quant.	Cost			Quant.	Cost		
Double Track At-Grade (Mile)					Start: 200 + 00	End: 215 + 00	0.28 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 200 + 00	End: 215 + 00	0.28 Miles			
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Double Track Section - Total														
1 Double Track Section - At Grade	Mile	\$	2,100,224				0.28	\$	596,655			0.00	\$	-
2 Double Track Section - On Structure	Mile	\$	4,700,160				0.00	\$	-			0.00	\$	-
3 Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160				0.00	\$	-			0.28	\$	1,335,273
4 Double Track Section - In Trench	Mile	\$	4,700,160				0.00	\$	-			0.00	\$	-
Four Track Section - Total														
Four-track Section - At Grade							0.00	\$	-			0.00	\$	-
Four-Track Section - On Structure	Mile	\$	9,400,320				0	\$	-			0	\$	-
Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320				0	\$	-			0.00	\$	-
Four-Track Section - In Trench	Mile	\$	9,400,320				0.00	\$	-			0.00	\$	-
Single Track - Total														
5 Single Track Section - At Grade	Mile	\$	1,549,312				0	\$	-			0	\$	-
6 Single Track Section - On structure	Mile	\$	2,350,080				0	\$	-			0	\$	-
7 Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080				0	\$	-			0	\$	-
8 Single Track Section - In Trench	Mile	\$	2,350,080				0	\$	-			0	\$	-
9 Freight Double Track - At Grade	Mile	\$	2,839,552				0	\$	-			0	\$	-
10 Freight Single Track - At Grade	Mile	\$	1,549,312				0	\$	-			0	\$	-
Earthwork Items														
1 Site Preparation - Undeveloped	Acre	\$	9,216				3.79	\$	34,909			3.79	\$	34,909
2 Total Cut	CY	\$	6				0.00	\$	-			96800.00	\$	624,476
3 Total Fill	CY	\$	6				0.00	\$	-			38720.00	\$	243,546
4 Borrow	CY	\$	13				0.00	\$	-			0.00	\$	-
5 Spoil	CY	\$	13				0.00	\$	-			58080.00	\$	730,637
6 Landscape erosion Control	Acre	\$	6,144				0.09	\$	553			1.20	\$	7,373
7 Security Fencing (Both sides of ROW)	Mile	\$	144,384				0.00	\$	-				\$	-
8 Special Drainage Facilities	5% Earthwork							\$	1,773				\$	82,047
Structures, Tunnels, Walls														
1 Standard Structure	Mile	\$	34,972,672				0.00	\$	-			0.00	\$	-
2 High Structure	Mile	\$	40,424,448					\$	-				\$	-
3 Long Span Structure	Mile	\$	61,919,232					\$	-				\$	-
4 Waterway Crossing - Primary	Mile	\$	85,342,208					\$	-				\$	-
5 Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408				0.00	\$	-			0.00	\$	-
6 Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264					\$	-				\$	-
7 Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312					\$	-				\$	-
8 Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896					\$	-				\$	-
9 Double Track Drill & Blast	Mile	\$	146,887,680				0.00	\$	-			0.00	\$	-
10 Double Track Mined (Soft Soil)	Mile	\$	79,200,000					\$	-				\$	-
Double Track TBM (<6 Miles)	Mile	\$	106,637,312					\$	-				\$	-
Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896					\$	-				\$	-
11 Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952					\$	-				\$	-
12 Crossovers	ea	\$	442,368					\$	-				\$	-
13 Cut & Cover Double Track Tunnel	Mile	\$	131,246,080				0.00	\$	-			0.28	\$	37,285,818
14 Trench Short	Mile	\$	78,843,904				0.00	\$	-			0.00	\$	-
15 Trench Long	Mile	\$	57,524,224					\$	-				\$	-
16 Mechanical & Electrical for Tunnels	Mile	\$	11,848,704					\$	-			0.28	\$	3,366,109
17 Retaining Walls	Mile	\$	8,613,888				0.00	\$	-			0.00	\$	-
18 Containment Walls	Mile	\$	5,907,456				0.00	\$	-			0.00	\$	-
19 Single Track Cut and Cover Subway	Mile	\$	131,246,080					\$	-				\$	-
Four Track Drill & Blast	Mile	\$	293,775,360					\$	-				\$	-
Four Track Mined (Soft Soil)	Mile	\$	158,400,000					\$	-				\$	-
Four Track TBM (<6 Miles)	Mile	\$	213,274,624					\$	-				\$	-
Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792					\$	-				\$	-
Four Track Cut & Cover Tunnel	Mile	\$	262,492,160				0.00	\$	-				\$	-
Grade Separations														
1 Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352				2	\$	26,568,704				\$	-
Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528					\$	-				\$	-
2 Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680				0	\$	-				\$	-
3 Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568					\$	-				\$	-
4 Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520				0	\$	-			0	\$	-
5 Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216					\$	-				\$	-
Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816				0	\$	-			0	\$	-
6 Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328					\$	-				\$	-
7 Street Bridging HSR Trench	ea	\$	1,398,784					\$	-				\$	-
8 Minor Crossing Closures	ea	\$	87,040					\$	-				\$	-
Building Items														

COST ELEMENTS			UNIT	UNIT PRICE	At-Grade				Tunnel					
Subsection 1				Base: 2009 (3rd Quarter)	A				A					
					Start: 200 + 00	End: 215 + 00	0.28 Miles		Start: 200 + 00	End: 215 + 00	0.28 Miles			
Subsection Details							Quant.	Cost			Quant.	Cost		
Double Track At-Grade (Mile)					Start: 200 + 00	End: 215 + 00	0.28 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 200 + 00	End: 215 + 00	0.28 Miles			
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
1 Intermediate Passenger Stations	Each	\$	-				\$	-				\$	-	
2 Terminal Passenger Stations	Each	\$	-				\$	-				\$	-	
Caltrain Passenger Station - At-Grade	Each		\$15,000,000				\$	-				\$	-	
Caltrain Passenger Station - On Structure	Each		\$15,000,000				\$	-				\$	-	
Caltrain Passenger Station - In Tunnel or Subway	Each		\$15,000,000				\$	-				\$	-	
Caltrain Passenger Station - In Trench	Each		\$15,000,000				\$	-				\$	-	
3 Maintenance Facility	Each	\$	123,921,884				\$	-				\$	-	
4 Parking - Structures	space	\$	-				\$	-				\$	-	
5 Parking - At Grade	space	\$	-				\$	-				\$	-	
Rail & Utility Relocation														
1 Single Track Relocation (Temporary)	Mile	\$	2,000,896				\$	-				\$	-	
2 Single Track Relocation (Permanent)	Mile	\$	2,000,896				\$	-				\$	-	
3 Single Track Removal	Mile	\$	130,048				\$	-				\$	-	
4 Major Utility Relocations - Dense Urban	Mile	\$	1,548,288				\$	-				\$	-	
5 Major Utility Relocations - Urban	Mile	\$	1,084,416				\$	-				\$	-	
6 Major Utility Relocations - Dense Suburban	Mile	\$	775,168				\$	-				\$	-	
7 Major Utility Relocations - Suburban	Mile	\$	464,896				\$	-				\$	-	
8 Major Utility Relocations - Undeveloped	Mile	\$	30,720				\$	-				\$	-	
ROW (NOT INCLUDED)														
ROW required for each segment														
1 Dense Urban	Acre	\$	2,786,321				\$	-				\$	-	
2 Urban	Acre	\$	1,371,510				\$	-				\$	-	
3 Dense Suburban	Acre	\$	908,134				\$	-				\$	-	
4 Suburban	Acre	\$	208,418				\$	-				\$	-	
5 Undeveloped	Acre	\$	3,642				\$	-				\$	-	
ROW required for Temp. Construction Easement														
1 Dense Urban	Acre						\$	-				\$	-	
2 Urban	Acre						\$	-				\$	-	
3 Dense Suburban	Acre						\$	-				\$	-	
4 Suburban	Acre						\$	-				\$	-	
5 Undeveloped	Acre						\$	-				\$	-	
Right-of-Way Required for Stations, Maintenance & Parking Facilities														
6 Dense Urban	Acre	\$	2,786,321				\$	-				\$	-	
7 Urban	Acre	\$	1,371,510				\$	-				\$	-	
8 Dense Suburban	Acre	\$	908,134				\$	-				\$	-	
9 Suburban	Acre	\$	208,418				\$	-				\$	-	
10 Undeveloped	Acre	\$	3,642				\$	-				\$	-	
Environmental Mitigation = 3% Line Costs								\$	816,078				\$	1,311,306
System Elements														
1 Signaling (ATC)	Mile	\$	2,070,000			0.28	\$	588,068			0.28	\$	588,068	
2 Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			0.28	\$	153,409			0.28	\$	153,409	
3 Wayside Protection System	Mile	\$	108,000			0.28	\$	30,682			0.28	\$	30,682	
Electrification Items														
1 Traction Power supply	Mile	\$	1,170,000			0.28	\$	332,386			0.28	\$	332,386	
2 Traction Power Distribution	Mile	\$	1,485,000			0.28	\$	421,875			0.28	\$	421,875	
Subtotal								\$	29,545,092			\$	46,547,914	
Program Implementation Costs (per screening)								\$	7,533,998			\$	11,869,718	
Program Implementation Costs														
Contingencies (per screening) (25%)								\$	7,386,273			\$	11,636,978	
Subtotal								\$	44,465,363			\$	70,054,611	
Subtotal Rounded								\$	44,000,000			\$	70,000,000	

COST ELEMENTS			UNIT	UNIT PRICE	At-Grade			Tunnel					
Subsection 1				Base: 2009 (3rd Quarter)	B			B					
					Start: 215 + 00	End: 255 + 00	0.76 Miles	Start: 215 + 00	End: 255 + 00	0.76 Miles			
Subsection Details						Quant.	Cost			Quant.	Cost		
Double Track At-Grade (Mile)				Start: 215 + 00	End: 255 + 00	0.76 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Double Track Elevated (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Double Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 215 + 00	End: 255 + 00	0.76 Miles			
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Elevated (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Double Track Section - Total													
1	Double Track Section - At Grade	Mile	\$	2,100,224			0.76	\$	1,591,079		0.00	\$	-
2	Double Track Section - On Structure	Mile	\$	4,700,160			0.00	\$	-		0.00	\$	-
3	Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160			0.00	\$	-		0.76	\$	3,560,727
4	Double Track Section - In Trench	Mile	\$	4,700,160			0.00	\$	-		0.00	\$	-
Four Track Section - Total													
	Four-track Section - At Grade	Mile	\$	4,200,448			0.00	\$	-		0.00	\$	-
	Four-Track Section - On Structure	Mile	\$	9,400,320			0	\$	-		0.00	\$	-
	Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320			0	\$	-		0.00	\$	-
	Four-Track Section - In Trench	Mile	\$	9,400,320			0.00	\$	-		0.00	\$	-
Single Track - Total													
5	Single Track Section - At Grade	Mile	\$	1,549,312			0	\$	-		0.00	\$	-
6	Single Track Section - On structure	Mile	\$	2,350,080			0	\$	-		0.00	\$	-
7	Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080			0	\$	-		0.00	\$	-
8	Single Track Section - In Trench	Mile	\$	2,350,080			0	\$	-		0.00	\$	-
9	Freight Double Track - At Grade	Mile	\$	2,839,552			0	\$	-		0.00	\$	-
10	Freight Single Track - At Grade	Mile	\$	1,549,312			0	\$	-		0.00	\$	-
Earthwork Items													
1	Site Preparation - Undeveloped	Acre	\$	9,216			10.10	\$	93,091		10.10	\$	93,091
2	Total Cut	CY	\$	6			0.00	\$	-		652666.00	\$	4,210,479
3	Total Fill	CY	\$	6			261066.00	\$	1,642,084		261066.00	\$	1,642,084
4	Borrow	CY	\$	13			261066.00	\$	3,284,169		0.00	\$	-
5	Spoil	CY	\$	13			0.00	\$	-		391600.00	\$	4,926,265
6	Landscape erosion Control	Acre	\$	6,144			0.09	\$	553		8.09	\$	49,705
7	Security Fencing (Both sides of ROW)	Mile	\$	144,384			0.76	\$	109,382		0.00	\$	-
8	Special Drainage Facilities	5% Earthwork						\$	256,464			\$	546,081
Structures, Tunnels, Walls													
1	Standard Structure	Mile	\$	34,972,672			0.00	\$	-		0.00	\$	-
2	High Structure	Mile	\$	40,424,448				\$	-			\$	-
3	Long Span Structure	Mile	\$	61,919,232				\$	-			\$	-
4	Waterway Crossing - Primary	Mile	\$	85,342,208				\$	-			\$	-
5	Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408			0.00	\$	-			\$	-
6	Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264				\$	-			\$	-
7	Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312				\$	-			\$	-
8	Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896				\$	-			\$	-
9	Double Track Drill & Blast	Mile	\$	146,887,680			0.00	\$	-		0.76	\$	111,278,545
10	Double Track Mined (Soft Soil)	Mile	\$	79,200,000				\$	-			\$	-
	Double Track TBM (<6 Miles)	Mile	\$	106,637,312				\$	-				
	Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896				\$	-				
11	Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952				\$	-			\$	-
12	Crossovers	ea	\$	442,368				\$	-			\$	-
13	Cut & Cover Double Track Tunnel	Mile	\$	131,246,080			0.00	\$	-		0.00	\$	-
14	Trench Short	Mile	\$	78,843,904			0.00	\$	-			\$	-
15	Trench Long	Mile	\$	57,524,224				\$	-			\$	-
16	Mechanical & Electrical for Tunnels	Mile	\$	11,848,704				\$	-		0.76	\$	8,976,291
17	Retaining Walls	Mile	\$	8,613,888			0.00	\$	-			\$	-
18	Containment Walls	Mile	\$	5,907,456			0.00	\$	-			\$	-
19	Single Track Cut and Cover Subway	Mile	\$	131,246,080				\$	-			\$	-
	Four Track Drill & Blast	Mile	\$	293,775,360				\$	-			\$	-
	Four Track Mined (Soft Soil)	Mile	\$	158,400,000				\$	-				
	Four Track TBM (<6 Miles)	Mile	\$	213,274,624				\$	-				
	Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792				\$	-				
	Four Track Cut & Cover Tunnel	Mile	\$	262,492,160			0.00	\$	-			\$	-
Grade Separations													
1	Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352				\$	-			\$	-
	Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528				\$	-			\$	-
2	Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680				\$	-			\$	-
3	Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568				\$	-			\$	-
4	Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520			0	\$	-			\$	-
5	Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216				\$	-			\$	-
	Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816			0	\$	-			\$	-
6	Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328				\$	-			\$	-
7	Street Bridging HSR Trench	ea	\$	1,398,784				\$	-			\$	-
8	Minor Crossing Closures	ea	\$	87,040				\$	-			\$	-
Building Items													

COST ELEMENTS			UNIT	UNIT PRICE	At-Grade			Tunnel				
Subsection 1				Base: 2009 (3rd Quarter)	B			B				
					Start: 215 + 00	End: 255 + 00	0.76 Miles	Start: 215 + 00	End: 255 + 00	0.76 Miles		
Subsection Details						Quant.	Cost			Quant.	Cost	
Double Track At-Grade (Mile)					Start: 215 + 00	End: 255 + 00	0.76 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 215 + 00	End: 255 + 00	0.76 Miles	
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
1 Intermediate Passenger Stations	Each	\$	-				\$	-			\$	-
2 Terminal Passenger Stations	Each	\$	-				\$	-			\$	-
Caltrain Passenger Station - At-Grade	Each	\$	15,000,000				\$	-			\$	-
Caltrain Passenger Station - On Structure	Each	\$	15,000,000				\$	-			\$	-
Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000				\$	-			\$	-
Caltrain Passenger Station - In Trench	Each	\$	15,000,000				\$	-			\$	-
3 Maintenance Facility	Each	\$	123,921,884				\$	-			\$	-
4 Parking - Structures	space	\$	-				\$	-			\$	-
5 Parking - At Grade	space	\$	-				\$	-			\$	-
Rail & Utility Relocation												
1 Single Track Relocation (Temporary)	Mile	\$	2,000,896				\$	-			\$	-
2 Single Track Relocation (Permanent)	Mile	\$	2,000,896				\$	-			\$	-
3 Single Track Removal	Mile	\$	130,048				\$	-			\$	-
4 Major Utility Relocations - Dense Urban	Mile	\$	1,548,288				\$	-			\$	-
5 Major Utility Relocations - Urban	Mile	\$	1,084,416				\$	-			\$	-
6 Major Utility Relocations - Dense Suburban	Mile	\$	775,168				\$	-			\$	-
7 Major Utility Relocations - Suburban	Mile	\$	464,896				\$	-			\$	-
8 Major Utility Relocations - Undeveloped	Mile	\$	30,720				\$	-			\$	-
ROW (NOT INCLUDED)												
ROW required for each segment												
1 Dense Urban	Acre	\$	2,786,321				\$	-			\$	-
2 Urban	Acre	\$	1,371,510				\$	-			\$	-
3 Dense Suburban	Acre	\$	908,134				\$	-			\$	-
4 Suburban	Acre	\$	208,418				\$	-			\$	-
5 Undeveloped	Acre	\$	3,642				\$	-			\$	-
ROW required for Temp. Construction Easement												
1 Dense Urban	Acre						\$	-			\$	-
2 Urban	Acre						\$	-			\$	-
3 Dense Suburban	Acre						\$	-			\$	-
4 Suburban	Acre						\$	-			\$	-
5 Undeveloped	Acre						\$	-			\$	-
Right-of-Way Required for Stations, Maintenance & Parking Facilities												
6 Dense Urban	Acre	\$	2,786,321				\$	-			\$	-
7 Urban	Acre	\$	1,371,510				\$	-			\$	-
8 Dense Suburban	Acre	\$	908,134				\$	-			\$	-
9 Suburban	Acre	\$	208,418				\$	-			\$	-
10 Undeveloped	Acre	\$	3,642				\$	-			\$	-
Environmental Mitigation = 3% Line Costs							\$	209,305			\$	4,058,498
System Elements												
1 Signaling (ATC)	Mile	\$	2,070,000			0.76	\$	1,568,182		0.76	\$	1,568,182
2 Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			0.76	\$	409,091		0.76	\$	409,091
3 Wayside Protection System	Mile	\$	108,000			0.76	\$	81,818		0.76	\$	81,818
Electrification Items												
1 Traction Power supply	Mile	\$	1,170,000			0.76	\$	886,364		0.76	\$	886,364
2 Traction Power Distribution	Mile	\$	1,485,000			0.76	\$	1,125,000		0.76	\$	1,125,000
Subtotal							\$	11,256,580			\$	143,412,222
Program Implementation Costs (per screening)							\$	2,870,428			\$	36,570,117
Program Implementation Costs												
Contingencies (per screening) (25%)							\$	2,814,145			\$	35,853,055
Subtotal							\$	16,941,153			\$	215,835,394
Subtotal (Rounded)							\$ 17,000,000				\$ 216,000,000	

COST ELEMENTS			UNIT	UNIT PRICE	At-Grade			Tunnel						
Subsection 1				Base: 2009 (3rd Quarter)	C			C						
					Start: 255 + 00	End: 267 + 00	0.23 Miles	Start: 255 + 00	End: 267 + 00	0.23 Miles				
Subsection Details						Quant.	Cost			Quant.	Cost			
Double Track At-Grade (Mile)					Start: 255 + 00	End: 267 + 00	0.23 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 255 + 00	End: 267 + 00	0.23 Miles			
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Double Track Section - Total														
1	Double Track Section - At Grade	Mile	\$	2,100,224			0.23	\$	477,324			0.00	\$	
2	Double Track Section - On Structure	Mile	\$	4,700,160			0.00	\$	-			0.00	\$	-
3	Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160			0.00	\$	-			0.23	\$	1,068,218
4	Double Track Section - In Trench	Mile	\$	4,700,160			0.00	\$	-			0.00	\$	-
Four Track Section - Total														
Four-track Section - At Grade				Mile	\$	4,200,448	0.00	\$	-			0.00	\$	-
Four-Track Section - On Structure				Mile	\$	9,400,320	0	\$	-			0.00	\$	-
Four-Track Section - In Tunnel or Subway				Mile	\$	9,400,320	0	\$	-			0.00	\$	-
Four-Track Section - In Trench				Mile	\$	9,400,320	0.00	\$	-			0.00	\$	-
Single Track - Total														
5	Single Track Section - At Grade	Mile	\$	1,549,312			0	\$	-			0.00	\$	-
6	Single Track Section - On structure	Mile	\$	2,350,080			0	\$	-			0.00	\$	-
7	Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080			0	\$	-			0.00	\$	-
8	Single Track Section - In Trench	Mile	\$	2,350,080			0	\$	-			0.00	\$	-
9	Freight Double Track - At Grade	Mile	\$	2,839,552			0	\$	-			0.00	\$	-
10	Freight Single Track - At Grade	Mile	\$	1,549,312			0	\$	-			0.00	\$	-
Earthwork Items														
1	Site Preparation - Undeveloped	Acre	\$	9,216			3.03	\$	27,927			3.03	\$	27,927
2	Total Cut	CY	\$	6			0.00	\$	-			84333.00	\$	544,049
3	Total Fill	CY	\$	6			33733.00	\$	212,178			33733.00	\$	212,178
4	Borrow	CY	\$	13			33733.00	\$	424,356			0.00	\$	-
5	Spoil	CY	\$	13			0.00	\$	-			50600.00	\$	636,540
6	Landscape erosion Control	Acre	\$	6,144			0.09	\$	553			1.05	\$	6,451
7	Security Fencing (Both sides of ROW)	Mile	\$	144,384			0.23	\$	32,815			0.00	\$	-
8	Special Drainage Facilities	5% Earthwork						\$	34,891				\$	71,357
Structures, Tunnels, Walls														
1	Standard Structure	Mile	\$	34,972,672			0.00	\$	-			0.00	\$	-
2	High Structure	Mile	\$	40,424,448				\$	-				\$	-
3	Long Span Structure	Mile	\$	61,919,232				\$	-				\$	-
4	Waterway Crossing - Primary	Mile	\$	85,342,208				\$	-				\$	-
5	Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408			0.00	\$	-				\$	-
6	Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264				\$	-				\$	-
7	Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312				\$	-				\$	-
8	Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896				\$	-				\$	-
9	Double Track Drill & Blast	Mile	\$	146,887,680			0.00	\$	-			0.23	\$	33,383,564
10	Double Track Mined (Soft Soil)	Mile	\$	79,200,000				\$	-				\$	-
	Double Track TBM (<6 Miles)	Mile	\$	106,637,312				\$	-				\$	-
	Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896				\$	-				\$	-
11	Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952				\$	-				\$	-
12	Crossovers	ea	\$	442,368				\$	-				\$	-
13	Cut & Cover Double Track Tunnel	Mile	\$	131,246,080			0.00	\$	-			0.00	\$	-
14	Trench Short	Mile	\$	78,843,904			0.00	\$	-				\$	-
15	Trench Long	Mile	\$	57,524,224				\$	-				\$	-
16	Mechanical & Electrical for Tunnels	Mile	\$	11,848,704				\$	-			0.23	\$	2,692,887
17	Retaining Walls	Mile	\$	8,613,888			0.00	\$	-				\$	-
18	Containment Walls	Mile	\$	5,907,456			0.00	\$	-				\$	-
19	Single Track Cut and Cover Subway	Mile	\$	131,246,080				\$	-				\$	-
	Four Track Drill & Blast	Mile	\$	293,775,360				\$	-				\$	-
	Four Track Mined (Soft Soil)	Mile	\$	158,400,000				\$	-				\$	-
	Four Track TBM (<6 Miles)	Mile	\$	213,274,624				\$	-				\$	-
	Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792				\$	-				\$	-
	Four Track Cut & Cover Tunnel	Mile	\$	262,492,160			0.00	\$	-				\$	-
Grade Separations														
1	Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352				\$	-				\$	-
	Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528				\$	-				\$	-
2	Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680				\$	-				\$	-
3	Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568				\$	-				\$	-
4	Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520			0	\$	-				\$	-
5	Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216				\$	-				\$	-
	Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816			0	\$	-				\$	-
6	Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328				\$	-				\$	-
7	Street Bridging HSR Trench	ea	\$	1,398,784				\$	-				\$	-
8	Minor Crossing Closures	ea	\$	87,040				\$	-				\$	-
Building Items														

COST ELEMENTS			UNIT	UNIT PRICE	At-Grade			Tunnel					
Subsection 1			Base: 2009 (3rd Quarter)	C			C						
				Start: 255 + 00	End: 267 + 00	0.23 Miles	Start: 255 + 00	End: 267 + 00	0.23 Miles				
Subsection Details						Quant.	Cost			Quant.	Cost		
Double Track At-Grade (Mile)				Start: 255 + 00	End: 267 + 00	0.23 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Double Track Elevated (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Double Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 255 + 00	End: 267 + 00	0.23 Miles			
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Elevated (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
1 Intermediate Passenger Stations	Each	\$	-				\$	-			\$	-	
2 Terminal Passenger Stations	Each	\$	-				\$	-			\$	-	
Caltrain Passenger Station - At-Grade	Each	\$	15,000,000				\$	-			\$	-	
Caltrain Passenger Station - On Structure	Each	\$	15,000,000				\$	-			\$	-	
Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000				\$	-			\$	-	
Caltrain Passenger Station - In Trench	Each	\$	15,000,000				\$	-			\$	-	
3 Maintenance Facility	Each	\$	123,921,884				\$	-			\$	-	
4 Parking - Structures	space	\$	-				\$	-			\$	-	
5 Parking - At Grade	space	\$	-				\$	-			\$	-	
Rail & Utility Relocation													
1 Single Track Relocation (Temporary)	Mile	\$	2,000,896				\$	-			\$	-	
2 Single Track Relocation (Permanent)	Mile	\$	2,000,896				\$	-			\$	-	
3 Single Track Removal	Mile	\$	130,048				\$	-			\$	-	
4 Major Utility Relocations - Dense Urban	Mile	\$	1,548,288				\$	-			\$	-	
5 Major Utility Relocations - Urban	Mile	\$	1,084,416				\$	-			\$	-	
6 Major Utility Relocations - Dense Suburban	Mile	\$	775,168				\$	-			\$	-	
7 Major Utility Relocations - Suburban	Mile	\$	464,896				\$	-			\$	-	
8 Major Utility Relocations - Undeveloped	Mile	\$	30,720				\$	-			\$	-	
ROW (NOT INCLUDED)													
ROW required for each segment													
1 Dense Urban	Acre	\$	2,786,321				\$	-			\$	-	
2 Urban	Acre	\$	1,371,510				\$	-			\$	-	
3 Dense Suburban	Acre	\$	908,134				\$	-			\$	-	
4 Suburban	Acre	\$	208,418				\$	-			\$	-	
5 Undeveloped	Acre	\$	3,642				\$	-			\$	-	
ROW required for Temp. Construction Easement													
1 Dense Urban	Acre						\$	-			\$	-	
2 Urban	Acre						\$	-			\$	-	
3 Dense Suburban	Acre						\$	-			\$	-	
4 Suburban	Acre						\$	-			\$	-	
5 Undeveloped	Acre						\$	-			\$	-	
Right-of-Way Required for Stations, Maintenance & Parking Facilities													
6 Dense Urban	Acre	\$	2,786,321				\$	-			\$	-	
7 Urban	Acre	\$	1,371,510				\$	-			\$	-	
8 Dense Suburban	Acre	\$	908,134				\$	-			\$	-	
9 Suburban	Acre	\$	208,418				\$	-			\$	-	
10 Undeveloped	Acre	\$	3,642				\$	-			\$	-	
Environmental Mitigation = 3% Line Costs							\$	36,301			\$	1,159,295	
System Elements													
1 Signaling (ATC)	Mile	\$	2,070,000			0.23	\$	470,455			0.23	\$	470,455
2 Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			0.23	\$	122,727			0.23	\$	122,727
3 Wayside Protection System	Mile	\$	108,000			0.23	\$	24,545			0.23	\$	24,545
Electrification Items													
1 Traction Power supply	Mile	\$	1,170,000			0.23	\$	265,909			0.23	\$	265,909
2 Traction Power Distribution	Mile	\$	1,485,000			0.23	\$	337,500			0.23	\$	337,500
Subtotal							\$	2,467,481			\$	41,023,603	
Program Implementation Costs (per screening)							\$	629,208			\$	10,461,019	
Program Implementation Costs													
Contingencies (per screening) (25%)							\$	616,870			\$	10,255,901	
Subtotal							\$	3,713,559			\$	61,740,523	
Subtotal (Rounded)							\$	4,000,000			\$	62,000,000	

COST ELEMENTS			UNIT	UNIT PRICE	At-Grade (2 Tracks)				At-Grade (4 Tracks)				Tunnel			
Subsection 1			Base: 2009 (3rd Quarter)		D				D				D			
					Start: 267 + 00	End: 315 + 00	0.91 Miles		Start: 267 + 00	End: 315 + 00	0.91 Miles		Start: 267 + 00	End: 315 + 00	0.91 Miles	
Subsection Details							Quant.	Cost			Quant.	Cost			Quant.	Cost
Double Track At-Grade (Mile)					Start: 267 + 00	End: 315 + 00	0.91 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 267 + 00	End: 315 + 00	0.91 Miles	
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 267 + 00	End: 315 + 00	0.91 Miles		Start: 0 + 00		0.00 Miles	
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Section - Total																
1 Double Track Section - At Grade	Mile	\$	2,100,224				0.91	\$ 1,909,295			0.00	\$ -			0.00	\$ -
2 Double Track Section - On Structure	Mile	\$	4,700,160				0.00	\$ -			0.00	\$ -			0.00	\$ -
3 Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160				0.00	\$ -			0.00	\$ -			0.91	\$ 4,272,873
4 Double Track Section - In Trench	Mile	\$	4,700,160				0.00	\$ -			0.00	\$ -			0.00	\$ -
Four Track Section - Total																
Four-track Section - At Grade	Mile	\$	4,200,448				0.00	\$ -			0.00	\$ -			0.00	\$ -
Four-Track Section - On Structure	Mile	\$	9,400,320				0	\$ -			0.91	\$ 8,545,745			0	\$ -
Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320				0	\$ -			0	\$ -			0	\$ -
Four-Track Section - In Trench	Mile	\$	9,400,320				0	\$ -			0	\$ -			0	\$ -
Single Track - Total																
5 Single Track Section - At Grade	Mile	\$	1,549,312				0	\$ -			0	\$ -			0	\$ -
6 Single Track Section - On structure	Mile	\$	2,350,080				0	\$ -			0	\$ -			0	\$ -
7 Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080				0	\$ -			0	\$ -			0	\$ -
8 Single Track Section - In Trench	Mile	\$	2,350,080				0	\$ -			0	\$ -			0	\$ -
9 Freight Double Track - At Grade	Mile	\$	2,839,552				0	\$ -			0	\$ -			0	\$ -
10 Freight Single Track - At Grade	Mile	\$	1,549,312				0	\$ -			0	\$ -			0	\$ -
Earthwork Items																
1 Site Preparation - Undeveloped	Acre	\$	9,216				12.12	\$ 111,709			12.12	\$ 111,709			0.00	\$ -
2 Total Cut	CY	\$	6				0.00	\$ -			0.00	\$ -			916667.00	\$ 5,913,602
3 Total Fill	CY	\$	6				0.00	\$ -			0.00	\$ -			366667.00	\$ 2,306,306
4 Borrow	CY	\$	13				0.00	\$ -			0.00	\$ -			0.00	\$ -
5 Spoil	CY	\$	13				0.00	\$ -			0.00	\$ -			550000.00	\$ 6,918,912
6 Landscape erosion Control	Acre	\$	6,144				0.85	\$ 5,222			0.85	\$ 5,222			0.00	\$ -
7 Security Fencing (Both sides of ROW)	Mile	\$	144,384				0.00	\$ -			0.00	\$ -			0.85	\$ 122,726
8 Special Drainage Facilities	5% Earthwork							\$ 5,847				\$ 5,847				\$ 763,077
Structures, Tunnels, Walls																
1 Standard Structure	Mile	\$	34,972,672				0.00	\$ -			0.91	\$ 31,793,338			0.00	\$ -
2 High Structure	Mile	\$	40,424,448					\$ -				\$ -				\$ -
3 Long Span Structure	Mile	\$	61,919,232					\$ -				\$ -				\$ -
4 Waterway Crossing - Primary	Mile	\$	85,342,208					\$ -				\$ -				\$ -
5 Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408					\$ -				\$ -				\$ -
6 Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264					\$ -				\$ -				\$ -
7 Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312					\$ -				\$ -				\$ -
8 Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896					\$ -				\$ -				\$ -
9 Double Track Drill & Blast	Mile	\$	146,887,680				0.00	\$ -			0.00	\$ -			0.91	\$ 133,534,255
10 Double Track Mined (Soft Soil)	Mile	\$	79,200,000					\$ -				\$ -			0.00	\$ -
Double Track TBM (<6 Miles)	Mile	\$	106,637,312												0.00	\$ -
Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896													
11 Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952					\$ -				\$ -				\$ -
12 Crossovers	ea	\$	442,368					\$ -				\$ -				\$ -
13 Cut & Cover Double Track Tunnel	Mile	\$	131,246,080				0.00	\$ -			0.00	\$ -				\$ -
14 Trench Short	Mile	\$	78,843,904				0.00	\$ -			0.00	\$ -				\$ -
15 Trench Long	Mile	\$	57,524,224					\$ -				\$ -				\$ -
16 Mechanical & Electrical for Tunnels	Mile	\$	11,848,704					\$ -				\$ -			0.91	\$ 10,771,549
17 Retaining Walls	Mile	\$	8,613,888				0.00	\$ -			0.00	\$ -				\$ -
18 Containment Walls	Mile	\$	5,907,456				0.00	\$ -			0.00	\$ -				\$ -
19 Single Track Cut and Cover Subway	Mile	\$	131,246,080					\$ -				\$ -				\$ -
Four Track Drill & Blast	Mile	\$	293,775,360					\$ -				\$ -				\$ -
Four Track Mined (Soft Soil)	Mile	\$	158,400,000					\$ -				\$ -				\$ -
Four Track TBM (<6 Miles)	Mile	\$	213,274,624					\$ -				\$ -				\$ -
Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792					\$ -				\$ -				\$ -
Four Track Cut & Cover Tunnel	Mile	\$	262,492,160				0.00	\$ -			0.00	\$ -			0.00	\$ -
Grade Separations																
1 Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352					\$ -				\$ -				\$ -
Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528					\$ -				\$ -				\$ -
2 Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680					\$ -				\$ -				\$ -
Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568					\$ -				\$ -				\$ -
4 Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520				0	\$ -			0	\$ -				\$ -
5 Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216					\$ -				\$ -				\$ -
Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816					\$ -				\$ -				\$ -
6 Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328					\$ -				\$ -				\$ -
7 Street Bridging HSR Trench	ea	\$	1,398,784					\$ -				\$ -			0	\$ -
8 Minor Crossing Closures	ea	\$	87,040					\$ -				\$ -			0	\$ -

COST ELEMENTS			UNIT	UNIT PRICE	At-Grade (2 Tracks)				At-Grade (4 Tracks)				Tunnel				
Subsection 1				Base: 2009 (3rd Quarter)	D				D				D				
					Start: 267 + 00	End: 315 + 00	0.91 Miles		Start: 267 + 00	End: 315 + 00	0.91 Miles		Start: 267 + 00	End: 315 + 00	0.91 Miles		
Subsection Details						Quant.	Cost				Quant.	Cost				Quant.	Cost
Double Track At-Grade (Mile)					Start: 267 + 00	End: 315 + 00	0.91 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00			0.00 Miles	
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00			0.00 Miles	
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 267 + 00	End: 315 + 00		0.91 Miles	
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00			0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00		0.00 Miles	
Four Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 267 + 00	End: 315 + 00	0.91 Miles		Start: 0 + 00			0.00 Miles	
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00			0.00 Miles	
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00			0.00 Miles	
Building Items																	
1	Intermediate Passenger Stations	Each	\$	-				\$	-			\$	-			\$	-
2	Terminal Passenger Stations	Each	\$	-				\$	-			\$	-			\$	-
	Caltrain Passenger Station - At-Grade	Each	\$	\$15,000,000				\$	-			\$	-			\$	-
	Caltrain Passenger Station - On Structure	Each	\$	\$15,000,000				\$	-			\$	-			\$	-
	Caltrain Passenger Station - In Tunnel or Subway	Each	\$	\$15,000,000				\$	-			\$	-			\$	-
	Caltrain Passenger Station - In Trench	Each	\$	\$15,000,000				\$	-			\$	-			\$	-
3	Maintenance Facility	Each	\$	123,921,884				\$	-			\$	-			\$	-
4	Parking - Structures	space	\$	-				\$	-			\$	-			\$	-
5	Parking - At Grade	space	\$	-				\$	-			\$	-			\$	-
Rail & Utility Relocation																	
1	Single Track Relocation (Temporary)	Mile	\$	2,000,896				\$	-			\$	-			\$	-
2	Single Track Relocation (Permanent)	Mile	\$	2,000,896				\$	-			\$	-			\$	-
3	Single Track Removal	Mile	\$	130,048				\$	-			\$	-			\$	-
4	Major Utility Relocations - Dense Urban	Mile	\$	1,548,288				\$	-			\$	-			\$	-
5	Major Utility Relocations - Urban	Mile	\$	1,084,416				\$	-			\$	-			\$	-
6	Major Utility Relocations - Dense Suburban	Mile	\$	775,168				\$	-			\$	-			\$	-
7	Major Utility Relocations - Suburban	Mile	\$	464,896				\$	-			\$	-			\$	-
8	Major Utility Relocations - Undeveloped	Mile	\$	30,720				\$	-			\$	-			\$	-
ROW (NOT INCLUDED)																	
ROW required for each segment																	
1	Dense Urban	Acre	\$	2,786,321				\$	-			\$	-			\$	-
2	Urban	Acre	\$	1,371,510				\$	-			\$	-			\$	-
3	Dense Suburban	Acre	\$	908,134				\$	-			\$	-			\$	-
4	Suburban	Acre	\$	208,418				\$	-			\$	-			\$	-
5	Undeveloped	Acre	\$	3,642				\$	-			\$	-			\$	-
ROW required for Temp. Construction Easement																	
1	Dense Urban	Acre						\$	-			\$	-			\$	-
2	Urban	Acre						\$	-			\$	-			\$	-
3	Dense Suburban	Acre						\$	-			\$	-			\$	-
4	Suburban	Acre						\$	-			\$	-			\$	-
5	Undeveloped	Acre						\$	-			\$	-			\$	-
Right-of-Way Required for Stations, Maintenance & Parking Facilities																	
6	Dense Urban	Acre	\$	2,786,321				\$	-			\$	-			\$	-
7	Urban	Acre	\$	1,371,510				\$	-			\$	-			\$	-
8	Dense Suburban	Acre	\$	908,134				\$	-			\$	-			\$	-
9	Suburban	Acre	\$	208,418				\$	-			\$	-			\$	-
10	Undeveloped	Acre	\$	3,642				\$	-			\$	-			\$	-
Environmental Mitigation = 3% Line Costs								\$	60,962			\$	1,213,856			\$	4,938,099
System Elements																	
1	Signaling (ATC)	Mile	\$	2,070,000			0.91	\$	1,881,818			0.91	\$		0.91	\$	1,881,818
2	Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			0.91	\$	490,909			0.91	\$		0.91	\$	490,909
3	Wayside Protection System	Mile	\$	108,000			0.91	\$	98,182			0.91	\$		0.91	\$	98,182
Electrification Items																	
1	Traction Power supply	Mile	\$	1,170,000			0.91	\$	1,063,636			0.91	\$		0.91	\$	1,063,636
2	Traction Power Distribution	Mile	\$	1,485,000			0.91	\$	1,350,000			0.91	\$		0.91	\$	1,350,000
								\$	6,977,580			\$	46,560,263			\$	174,425,945
Program Implementation Costs (per screening)								\$	1,779,283			\$	11,872,867			\$	44,478,616
Program Implementation Costs																	
Contingencies (per screening) (25%)								\$	1,744,395			\$	11,640,066			\$	43,606,486
Subtotal								\$	10,501,258			\$	70,073,196			\$	262,511,047
Subtotal (Rounded)								\$	11,000,000			\$	70,000,000			\$	263,000,000

COST ELEMENTS				UNIT	UNIT PRICE	At-Grade (2 Tracks)				At-Grade (4 Tracks)				Tunnel									
Subsection 1				Base: 2009 (3rd Quarter)		E				E				E									
						Start: 315 + 00		End: 350 + 00		0.66 Miles		Start: 315 + 00		End: 350 + 00		0.66 Miles		Start: 315 + 00		Start: 350 + 00		0.66 Miles	
								Quant.	Cost			Quant.	Cost			Quant.	Cost						
Subsection Details																							
Double Track At-Grade (Mile)						Start: 315 + 00	End: 350 + 00	0.66 Miles		Start: 315 + 00	End: 350 + 00	0.66 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles							
Double Track Elevated (Mile)						Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles							
Double Track Tunnel (Mile)						Start: 0 + 00		0.00 Miles		Start: 315 + 00	End: 350 + 00	0.66 Miles		Start: 315 + 00	End: 350 + 00	0.66 Miles							
Double Track Trench (Mile)						Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles							
Four Track Construction/Reconstruction At-Grade (Mile)						Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles							
Four Track Elevated (Mile)						Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles							
Four Track Tunnel (Mile)						Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles							
Four Track Trench (Mile)						Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles							
1	Double Track Section - Total																						
1	Double Track Section - At Grade	Mile	\$	2,100,224				0.66	\$	1,392,194			0.66	\$	1,392,194			0.00	\$	-			
2	Double Track Section - On Structure	Mile	\$	4,700,160				0.00	\$	-			0.00	\$	-			0.00	\$	-			
3	Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160				0.00	\$	-			0.66	\$	3,115,636			0.66	\$	3,115,636			
4	Double Track Section - In Trench	Mile	\$	4,700,160				0.00	\$	-			0.00	\$	-			0.00	\$	-			
Four Track Section - Total																							
	Four-track Section - At Grade	Mile	\$	4,200,448				0.00	\$	-			0.00	\$	-			0.00	\$	-			
	Four-Track Section - On Structure	Mile	\$	9,400,320				0	\$	-			0	\$	-			0	\$	-			
	Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320				0	\$	-			0	\$	-			0	\$	-			
	Four-Track Section - In Trench	Mile	\$	9,400,320				0	\$	-			0	\$	-			0	\$	-			
Single Track - Total																							
5	Single Track Section - At Grade	Mile	\$	1,549,312				0	\$	-			0	\$	-			0	\$	-			
6	Single Track Section - On structure	Mile	\$	2,350,080				0	\$	-			0	\$	-			0	\$	-			
7	Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080				0	\$	-			0	\$	-			0	\$	-			
8	Single Track Section - In Trench	Mile	\$	2,350,080				0	\$	-			0	\$	-			0	\$	-			
9	Freight Double Track - At Grade	Mile	\$	2,839,552				0	\$	-			0	\$	-			0	\$	-			
10	Freight Single Track - At Grade	Mile	\$	1,549,312				0	\$	-			0	\$	-			0	\$	-			
Earthwork Items																							
1	Site Preparation - Undeveloped	Acre	\$	9,216				8.84	\$	81,469			8.84	\$	81,469			8.84	\$	81,469			
2	Total Cut	CY	\$	6				0.00	\$	-			0.00	\$	-			231815.00	\$	1,495,485			
3	Total Fill	CY	\$	6				0.00	\$	-			0.00	\$	-			92726.00	\$	583,239			
4	Borrow	CY	\$	13				0.00	\$	-			0.00	\$	-			0.00	\$	-			
5	Spoil	CY	\$	13				0.00	\$	-			0.00	\$	-			139089.00	\$	1,749,717			
6	Landscape erosion Control	Acre	\$	6,144				0.66	\$	4,055			0.66	\$	4,055			2.87	\$	17,633			
7	Security Fencing (Both sides of ROW)	Mile	\$	144,384				0.00	\$	-			0.00	\$	-			0.22	\$	31,764			
8	Special Drainage Facilities	5% Earthwork							\$	4,276				\$	4,276				\$	197,965			
Structures, Tunnels, Walls																							
1	Standard Structure	Mile	\$	34,972,672				0.00	\$	-			0.00	\$	-			0.00	\$	-			
2	High Structure	Mile	\$	40,424,448					\$	-				\$	-				\$	-			
3	Long Span Structure	Mile	\$	61,919,232					\$	-				\$	-				\$	-			
4	Waterway Crossing - Primary	Mile	\$	85,342,208					\$	-				\$	-				\$	-			
5	Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408					\$	-				\$	-				\$	-			
6	Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264					\$	-				\$	-				\$	-			
7	Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312					\$	-				\$	-				\$	-			
8	Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896					\$	-				\$	-				\$	-			
9	Double Track Drill & Blast	Mile	\$	146,887,680				0.00	\$	-			0.66	\$	97,368,727			0.66	\$	97,368,727			
10	Double Track Mined (Soft Soil)	Mile	\$	79,200,000					\$	-				\$	-				\$	-			
	Double Track TBM (<6 Miles)	Mile	\$	106,637,312																			
	Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896																			
11	Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952					\$	-				\$	-				\$	-			
12	Crossovers	ea	\$	442,368					\$	-				\$	-				\$	-			
13	Cut & Cover Double Track Tunnel	Mile	\$	131,246,080				0.00	\$	-			0.00	\$	-			0.00	\$	-			
14	Trench Short	Mile	\$	78,843,904				0.00	\$	-			0.00	\$	-				\$	-			
15	Trench Long	Mile	\$	57,524,224					\$	-				\$	-				\$	-			
16	Mechanical & Electrical for Tunnels	Mile	\$	11,848,704					\$	-				\$	-			0.66	\$	7,854,255			
17	Retaining Walls	Mile	\$	8,613,888				0.00	\$	-			0.00	\$	-				\$	-			
18	Containment Walls	Mile	\$	5,907,456				0.00	\$	-			0.00	\$	-				\$	-			
19	Single Track Cut and Cover Subway	Mile	\$	131,246,080					\$	-				\$	-				\$	-			
	Four Track Drill & Blast	Mile	\$	293,775,360					\$	-				\$	-				\$	-			
	Four Track Mined (Soft Soil)	Mile	\$	158,400,000					\$	-				\$	-				\$	-			
	Four Track TBM (<6 Miles)	Mile	\$	213,274,624														0.00	\$	-			
	Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792															\$	-			
	Four Track Cut & Cover Tunnel	Mile	\$	262,492,160				0.00	\$	-			0.00	\$	-				\$	-			
Grade Separations																							
1	Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352					\$	-				\$	-				\$	-			
	Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528					\$	-				\$	-				\$	-			
2	Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680					\$	-				\$	-				\$	-			
3	Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568					\$	-				\$	-				\$	-			
4	Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520				0	\$	-			0	\$	-				\$	-			
5	Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216					\$	-				\$	-				\$	-			
	Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816					\$	-				\$	-				\$	-			
6	Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328					\$	-				\$	-				\$	-			
7	Street Bridging HSR Trench	ea	\$	1,398,784					\$	-				\$	-				0	\$	-		
8	Minor Crossing Closures	ea	\$	87,040					\$	-				\$	-				0	\$	-		

COST ELEMENTS			UNIT	UNIT PRICE	At-Grade (2 Tracks)				At-Grade (4 Tracks)				Tunnel					
Subsection 1			Base: 2009 (3rd Quarter)		E				E				E					
					Start: 315 + 00	End: 350 + 00	0.66 Miles		Start: 315 + 00	End: 350 + 00	0.66 Miles		Start: 315 + 00	Start: 350 + 00	0.66 Miles			
Subsection Details							Quant.	Cost			Quant.	Cost			Quant.	Cost		
Double Track At-Grade (Mile)					Start: 315 + 00	End: 350 + 00	0.66 Miles		Start: 315 + 00	End: 350 + 00	0.66 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 315 + 00	End: 350 + 00	0.66 Miles		Start: 315 + 00	End: 350 + 00	0.66 Miles			
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Building Items			Each	\$														
1 Intermediate Passenger Stations	Each	\$	-					\$	-			\$	-			\$	-	
2 Terminal Passenger Stations	Each	\$	-					\$	-			\$	-			\$	-	
Caltrain Passenger Station - At-Grade	Each	\$15,000,000						\$	-			\$	-			\$	-	
Caltrain Passenger Station - On Structure	Each	\$15,000,000						\$	-			\$	-			\$	-	
Caltrain Passenger Station - In Tunnel or Subway	Each	\$15,000,000						\$	-			\$	-			\$	-	
Caltrain Passenger Station - In Trench	Each	\$15,000,000						\$	-			\$	-			\$	-	
3 Maintenance Facility	Each	\$ 123,921,884						\$	-			\$	-			\$	-	
4 Parking - Structures	space	\$	-					\$	-			\$	-			\$	-	
5 Parking - At Grade	space	\$	-					\$	-			\$	-			\$	-	
Rail & Utility Relocation																		
1 Single Track Relocation (Temporary)	Mile	\$ 2,000,896						\$	-			\$	-			\$	-	
2 Single Track Relocation (Permanent)	Mile	\$ 2,000,896						\$	-			\$	-			\$	-	
3 Single Track Removal	Mile	\$ 130,048						\$	-			\$	-			\$	-	
4 Major Utility Relocations - Dense Urban	Mile	\$ 1,548,288						\$	-			\$	-			\$	-	
5 Major Utility Relocations - Urban	Mile	\$ 1,084,416						\$	-			\$	-			\$	-	
6 Major Utility Relocations - Dense Suburban	Mile	\$ 775,168						\$	-			\$	-			\$	-	
7 Major Utility Relocations - Suburban	Mile	\$ 464,896						\$	-			\$	-			\$	-	
8 Major Utility Relocations - Undeveloped	Mile	\$ 30,720						\$	-			\$	-			\$	-	
ROW (NOT INCLUDED)																		
ROW required for each segment																		
1 Dense Urban	Acre	\$ 2,786,321						\$	-			\$	-			\$	-	
2 Urban	Acre	\$ 1,371,510						\$	-			\$	-			\$	-	
3 Dense Suburban	Acre	\$ 908,134						\$	-			\$	-			\$	-	
4 Suburban	Acre	\$ 208,418						\$	-			\$	-			\$	-	
5 Undeveloped	Acre	\$ 3,642						\$	-			\$	-			\$	-	
ROW required for Temp. Construction Easement																		
1 Dense Urban	Acre							\$	-			\$	-			\$	-	
2 Urban	Acre							\$	-			\$	-			\$	-	
3 Dense Suburban	Acre							\$	-			\$	-			\$	-	
4 Suburban	Acre							\$	-			\$	-			\$	-	
5 Undeveloped	Acre							\$	-			\$	-			\$	-	
Right-of-Way Required for Stations, Maintenance & Parking Facilities																		
6 Dense Urban	Acre	\$ 2,786,321						\$	-			\$	-			\$	-	
7 Urban	Acre	\$ 1,371,510						\$	-			\$	-			\$	-	
8 Dense Suburban	Acre	\$ 908,134						\$	-			\$	-			\$	-	
9 Suburban	Acre	\$ 208,418						\$	-			\$	-			\$	-	
10 Undeveloped	Acre	\$ 3,642						\$	-			\$	-			\$	-	
Environmental Mitigation = 3% Line Costs								\$ 44,460				\$ 3,058,991				\$ 3,374,877		
System Elements																		
1 Signaling (ATC)	Mile	\$ 2,070,000				0.66	\$ 1,372,159				0.66	\$ 1,372,159			0.66	\$ 1,372,159		
2 Communications (w/ Fiber Optic Backbone)	Mile	\$ 540,000				0.66	\$ 357,955				0.66	\$ 357,955			0.66	\$ 357,955		
3 Wayside Protection System	Mile	\$ 108,000				0.66	\$ 71,591				0.66	\$ 71,591			0.66	\$ 71,591		
Electrification Items																		
1 Traction Power supply	Mile	\$ 1,170,000				0.66	\$ 775,568				0.66	\$ 775,568			0.66	\$ 775,568		
2 Traction Power Distribution	Mile	\$ 1,485,000				0.66	\$ 984,375				0.66	\$ 984,375			0.66	\$ 984,375		
Subtotal							\$ 5,088,102					\$ 108,586,997				\$ 119,432,417		
Program Implementation Costs (per screening)							\$ 1,297,466					\$ 27,689,684				\$ 30,455,266		
Program Implementation Costs																		
Contingencies (per screening) (25%)							\$ 1,272,026					\$ 27,146,749				\$ 29,858,104		
Subtotal								\$ 7,657,594					\$ 163,423,430					\$ 179,745,787
Subtotal (Rounded)								\$ 8,000,000					\$ 163,000,000					\$ 180,000,000

COST ELEMENTS			UNIT	UNIT PRICE	At-Grade (2 Tracks)				At-Grade (4 Tracks)				Tunnel						
Subsection 1				Base: 2009 (3rd Quarter)	F				F				F						
					Start: 350 + 00	End: 376 + 00	0.49 Miles		Start: 350 + 00	End: 376 + 00	0.49 Miles		Start: 350 + 00	Start: 376 + 00	0.49 Miles				
Subsection Details							Quant.	Cost			Quant.	Cost			Quant.	Cost			
Double Track At-Grade (Mile)					Start: 350 + 00	End: 376 + 00	0.49 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles				
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 350 + 00	End: 376 + 00	0.49 Miles				
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles				
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 350 + 00	End: 376 + 00	0.49 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Four Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles				
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Double Track Section - Total																			
1 Double Track Section - At Grade	Mile	\$	2,100,224			0.49	\$	1,034,201			0.00	\$	-			0.00	\$	-	
2 Double Track Section - On Structure	Mile	\$	4,700,160			0.00	\$	-			0.00	\$	-			0.00	\$	-	
3 Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160			0.00	\$	-			0.00	\$	-			0.49	\$	2,314,473	
4 Double Track Section - In Trench	Mile	\$	4,700,160			0.00	\$	-			0.00	\$	-			0.00	\$	-	
Four Track Section - Total																			
Four-track Section - At Grade	Mile	\$	4,200,448			0.00	\$	-			0.49	\$	2,068,402			0.00	\$	-	
Four-Track Section - On Structure	Mile	\$	9,400,320			0	\$	-			0	\$	-			0	\$	-	
Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320			0	\$	-			0	\$	-			0	\$	-	
Four-Track Section - In Trench	Mile	\$	9,400,320			0	\$	-			0	\$	-			0	\$	-	
Single Track - Total																			
5 Single Track Section - At Grade	Mile	\$	1,549,312			0	\$	-			0	\$	-			0	\$	-	
6 Single Track Section - On structure	Mile	\$	2,350,080			0	\$	-			0	\$	-			0	\$	-	
7 Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080			0	\$	-			0	\$	-			0	\$	-	
8 Single Track Section - In Trench	Mile	\$	2,350,080			0	\$	-			0	\$	-			0	\$	-	
9 Freight Double Track - At Grade	Mile	\$	2,839,552			0	\$	-			0	\$	-			0	\$	-	
10 Freight Single Track - At Grade	Mile	\$	1,549,312			0	\$	-			0	\$	-			0	\$	-	
Earthwork Items																			
1 Site Preparation - Undeveloped	Acre	\$	9,216			6.57	\$	60,549			6.57	\$	60,549			6.57	\$	60,549	
2 Total Cut	CY	\$	6			0.00	\$	-			0.00	\$	-			529629.00	\$	3,416,743	
3 Total Fill	CY	\$	6			0.00	\$	-			0.00	\$	-			211851.00	\$	1,332,526	
4 Borrow	CY	\$	13			0.00	\$	-			0.00	\$	-			0.00	\$	-	
5 Spoil	CY	\$	13			0.00	\$	-			0.00	\$	-			317778.00	\$	3,997,596	
6 Landscape erosion Control	Acre	\$	6,144			0.49	\$	3,011			0.49	\$	3,011			6.57	\$	40,366	
7 Security Fencing (Both sides of ROW)	Mile	\$	144,384			0.00	\$	-			0.49	\$	71,098			0.49	\$	70,748	
8 Special Drainage Facilities	5% Earthwork						\$	3,178				\$	6,733				\$	445,926	
Structures, Tunnels, Walls																			
1 Standard Structure	Mile	\$	34,972,672			0.00	\$	-			0.00	\$	-			0.00	\$	-	
2 High Structure	Mile	\$	40,424,448				\$	-				\$	-				\$	-	
3 Long Span Structure	Mile	\$	61,919,232				\$	-				\$	-				\$	-	
4 Waterway Crossing - Primary	Mile	\$	85,342,208				\$	-				\$	-				\$	-	
5 Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408				\$	-				\$	-				\$	-	
6 Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264				\$	-				\$	-				\$	-	
7 Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312				\$	-				\$	-				\$	-	
8 Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896				\$	-				\$	-				\$	-	
9 Double Track Drill & Blast	Mile	\$	146,887,680			0.00	\$	-			0.00	\$	-			0.49	\$	72,331,055	
10 Double Track Mined (Soft Soil)	Mile	\$	79,200,000				\$	-				\$	-				\$	-	
Double Track TBM (<6 Miles)	Mile	\$	106,637,312																
Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896																
11 Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952				\$	-				\$	-				\$	-	
12 Crossovers	ea	\$	442,368				\$	-				\$	-				\$	-	
13 Cut & Cover Double Track Tunnel	Mile	\$	131,246,080			0.00	\$	-			0.00	\$	-			0.00	\$	-	
14 Trench Short	Mile	\$	78,843,904			0.00	\$	-			0.00	\$	-				\$	-	
15 Trench Long	Mile	\$	57,524,224				\$	-				\$	-				\$	-	
16 Mechanical & Electrical for Tunnels	Mile	\$	11,848,704				\$	-				\$	-			0.49	\$	5,834,589	
17 Retaining Walls	Mile	\$	8,613,888			0.00	\$	-			0.00	\$	-				\$	-	
18 Containment Walls	Mile	\$	5,907,456			0.00	\$	-			0.00	\$	-				\$	-	
19 Single Track Cut and Cover Subway	Mile	\$	131,246,080				\$	-				\$	-				\$	-	
Four Track Drill & Blast	Mile	\$	293,775,360				\$	-				\$	-				\$	-	
Four Track Mined (Soft Soil)	Mile	\$	158,400,000				\$	-				\$	-				\$	-	
Four Track TBM (<6 Miles)	Mile	\$	213,274,624												0.00	\$	-	-	
Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792													\$	-	-	
Four Track Cut & Cover Tunnel	Mile	\$	262,492,160			0.00	\$	-			0.00	\$	-				\$	-	
Grade Separations																			
1 Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352				\$	-				\$	-				\$	-	
Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528				\$	-				\$	-				\$	-	
2 Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680				\$	-				\$	-				\$	-	
3 Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568				\$	-				\$	-				\$	-	
4 Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520			0	\$	-			0	\$	-				\$	-	
5 Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216				\$	-				\$	-				\$	-	
Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816				\$	-				\$	-				\$	-	
6 Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328				\$	-				\$	-				\$	-	
7 Street Bridging HSR Trench	ea	\$	1,398,784				\$	-				\$	-				0	\$	-
8 Minor Crossing Closures	ea	\$	87,040				\$	-				\$	-				0	\$	-

COST ELEMENTS			UNIT	UNIT PRICE	At-Grade (2 Tracks)				At-Grade (4 Tracks)				Tunnel						
Subsection 1				Base: 2009 (3rd Quarter)	F				F				F						
					Start: 350 + 00	End: 376 + 00	0.49 Miles		Start: 350 + 00	End: 376 + 00	0.49 Miles		Start: 350 + 00	Start: 376 + 00	0.49 Miles				
Subsection Details							Quant.	Cost			Quant.	Cost			Quant.	Cost			
Double Track At-Grade (Mile)					Start: 350 + 00	End: 376 + 00	0.49 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles				
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 350 + 00	End: 376 + 00	0.49 Miles				
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles				
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 350 + 00	End: 376 + 00	0.49 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Four Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles				
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Building Items			Each	\$															
1 Intermediate Passenger Stations																			
2 Terminal Passenger Stations																			
Caltrain Passenger Station - At-Grade																			
Caltrain Passenger Station - On Structure																			
Caltrain Passenger Station - In Tunnel or Subway																			
Caltrain Passenger Station - In Trench																			
3 Maintenance Facility																			
4 Parking - Structures	space																		
5 Parking - At Grade	space																		
Rail & Utility Relocation																			
1 Single Track Relocation (Temporary)	Mile					0.49		\$	980,439			0.49		\$	980,439				
2 Single Track Relocation (Permanent)	Mile																		
3 Single Track Removal	Mile					0.49		\$	63,724			0.49		\$	63,724				
4 Major Utility Relocations - Dense Urban	Mile					0.49		\$	758,661			0.49		\$	758,661				
5 Major Utility Relocations - Urban	Mile							\$	-					\$	-				
6 Major Utility Relocations - Dense Suburban	Mile							\$	-					\$	-				
7 Major Utility Relocations - Suburban	Mile							\$	-					\$	-				
8 Major Utility Relocations - Undeveloped	Mile							\$	-					\$	-				
ROW (NOT INCLUDED)																			
ROW required for each segment																			
1 Dense Urban	Acre			\$	2,786,321			\$	-			\$	-			\$	-		
2 Urban	Acre			\$	1,371,510			\$	-			\$	-			\$	-		
3 Dense Suburban	Acre			\$	908,134			\$	-			\$	-			\$	-		
4 Suburban	Acre			\$	208,418			\$	-			\$	-			\$	-		
5 Undeveloped	Acre			\$	3,642			\$	-			\$	-			\$	-		
ROW required for Temp. Construction Easement																			
1 Dense Urban	Acre							\$	-			\$	-			\$	-		
2 Urban	Acre							\$	-			\$	-			\$	-		
3 Dense Suburban	Acre							\$	-			\$	-			\$	-		
4 Suburban	Acre							\$	-			\$	-			\$	-		
5 Undeveloped	Acre							\$	-			\$	-			\$	-		
Right-of-Way Required for Stations, Maintenance & Parking Facilities																			
6 Dense Urban	Acre			\$	2,786,321			\$	-			\$	-			\$	-		
7 Urban	Acre			\$	1,371,510			\$	-			\$	-			\$	-		
8 Dense Suburban	Acre			\$	908,134			\$	-			\$	-			\$	-		
9 Suburban	Acre			\$	208,418			\$	-			\$	-			\$	-		
10 Undeveloped	Acre			\$	3,642			\$	-			\$	-			\$	-		
Environmental Mitigation = 3% Line Costs								\$	87,113			\$	120,379			\$	2,695,337		
System Elements																			
1 Signaling (ATC)	Mile			\$	2,070,000			0.49	\$	1,019,318			0.49	\$	1,019,318		0.49	\$	1,019,318
2 Communications (w/ Fiber Optic Backbone)	Mile			\$	540,000			0.49	\$	265,909			0.49	\$	265,909		0.49	\$	265,909
3 Wayside Protection System	Mile			\$	108,000			0.49	\$	53,182			0.49	\$	53,182		0.49	\$	53,182
Electrification Items																			
1 Traction Power supply	Mile			\$	1,170,000			0.49	\$	576,136			0.49	\$	576,136		0.49	\$	576,136
2 Traction Power Distribution	Mile			\$	1,485,000			0.49	\$	731,250			0.49	\$	731,250		0.49	\$	731,250
Subtotal									\$	5,636,671				\$	6,778,791			\$	95,185,704
Program Implementation Costs (per screening)									\$	1,437,351				\$	1,728,592			\$	24,272,354
Program Implementation Costs																			
Contingencies (per screening) (25%)									\$	1,409,168				\$	1,694,698			\$	23,796,426
Subtotal									\$	8,483,190				\$	10,202,080			\$	143,254,484
Subtotal (Rounded)									\$	8,000,000				\$	10,000,000			\$	143,000,000

COST ELEMENTS			UNIT	UNIT PRICE	At-Grade (2 Tracks)				At-Grade (4 Tracks)				Tunnel									
Subsection 1				Base: 2009 (3rd Quarter)	G				G				G									
					Start: 376 + 00		End: 450 + 00		1.40 Miles		Start: 376 + 00		End: 450 + 00		1.40 Miles		Start: 376 + 00		Start: 450 + 00		1.40 Miles	
Subsection Details						Quant.	Cost			Quant.	Cost			Quant.	Cost							
Double Track At-Grade (Mile)				Start: 376 + 00	End: 450 + 00	1.40 Miles		Start: 376 + 00	End: 450 + 00	1.40 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles								
Double Track Elevated (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles								
Double Track Tunnel (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 376 + 00	End: 450 + 00	1.40 Miles								
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles								
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles								
Four Track Elevated (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles								
Four Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles								
Four Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles								
Double Track Section - Total																						
1 Double Track Section - At Grade	Mile	\$	2,100,224			1.40	\$ 2,943,496			0.66	\$ 1,389,330			0.00	\$ -							
2 Double Track Section - On Structure	Mile	\$	4,700,160			0.00	\$ -			0.00	\$ -			0.00	\$ -							
3 Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160			0.00	\$ -			0.74	\$ 3,478,118			1.40	\$ 6,587,345							
4 Double Track Section - In Trench	Mile	\$	4,700,160			0.00	\$ -			0.00	\$ -			0.00	\$ -							
Four Track Section - Total																						
Four-track Section - At Grade	Mile	\$	4,200,448			0.00	\$ -			0.00	\$ -			0.00	\$ -							
Four-Track Section - On Structure	Mile	\$	9,400,320			0	\$ -			0	\$ -			0	\$ -							
Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320			0	\$ -			0	\$ -			0	\$ -							
Four-Track Section - In Trench	Mile	\$	9,400,320			0	\$ -			0	\$ -			0	\$ -							
Single Track - Total																						
5 Single Track Section - At Grade	Mile	\$	1,549,312			0	\$ -			0	\$ -			0	\$ -							
6 Single Track Section - On structure	Mile	\$	2,350,080			0	\$ -			0	\$ -			0	\$ -							
7 Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080			0	\$ -			0	\$ -			0	\$ -							
8 Single Track Section - In Trench	Mile	\$	2,350,080			0	\$ -			0	\$ -			0	\$ -							
9 Freight Double Track - At Grade	Mile	\$	2,839,552			0	\$ -			0	\$ -			0	\$ -							
10 Freight Single Track - At Grade	Mile	\$	1,549,312			0	\$ -			0	\$ -			0	\$ -							
Earthwork Items																						
1 Site Preparation - Undeveloped	Acre	\$	9,216			18.69	\$ 172,218			18.69	\$ 172,218			18.69	\$ 172,218							
2 Total Cut	CY	\$	6			0.00	\$ -			0.00	\$ -			72314.81	\$ 466,517							
3 Total Fill	CY	\$	6			0.00	\$ -			0.00	\$ -			28925.93	\$ 181,942							
4 Borrow	CY	\$	13			0.00	\$ -			0.00	\$ -			0.00	\$ -							
5 Spoil	CY	\$	13			0.00	\$ -			0.00	\$ -			43388.89	\$ 545,825							
6 Landscape erosion Control	Acre	\$	6,144			0.74	\$ 4,547			0.74	\$ 4,547			0.90	\$ 5,508							
7 Security Fencing (Both sides of ROW)	Mile	\$	144,384			0.00	\$ -			0.00	\$ -			0.07	\$ 9,708							
8 Special Drainage Facilities	5% Earthwork						\$ 8,838				\$ 8,838				\$ 69,086							
Structures, Tunnels, Walls																						
1 Standard Structure	Mile	\$	34,972,672			0.00	\$ -			0.00	\$ -			0.00	\$ -							
2 High Structure	Mile	\$	40,424,448				\$ -				\$ -				\$ -							
3 Long Span Structure	Mile	\$	61,919,232				\$ -				\$ -				\$ -							
4 Waterway Crossing - Primary	Mile	\$	85,342,208				\$ -				\$ -				\$ -							
5 Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408				\$ -				\$ -				\$ -							
6 Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264				\$ -				\$ -				\$ -							
7 Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312				\$ -				\$ -				\$ -							
8 Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896				\$ -				\$ -				\$ -							
9 Double Track Drill & Blast	Mile	\$	146,887,680			0.00	\$ -			0.74	\$ 108,696,883			1.40	\$ 205,865,309							
10 Double Track Mined (Soft Soil)	Mile	\$	79,200,000				\$ -				\$ -				\$ -							
Double Track TBM (<6 Miles)	Mile	\$	106,637,312																			
Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896																			
11 Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952				\$ -				\$ -				\$ -							
12 Crossovers	ea	\$	442,368				\$ -				\$ -				\$ -							
13 Cut & Cover Double Track Tunnel	Mile	\$	131,246,080			0.00	\$ -			0.00	\$ -			0.00	\$ -							
14 Trench Short	Mile	\$	78,843,904			0.00	\$ -			0.00	\$ -				\$ -							
15 Trench Long	Mile	\$	57,524,224				\$ -				\$ -				\$ -							
16 Mechanical & Electrical for Tunnels	Mile	\$	11,848,704				\$ -				\$ -			1.40	\$ 16,606,138							
17 Retaining Walls	Mile	\$	8,613,888			0.00	\$ -			0.00	\$ -				\$ -							
18 Containment Walls	Mile	\$	5,907,456			0.00	\$ -			0.00	\$ -				\$ -							
19 Single Track Cut and Cover Subway	Mile	\$	131,246,080				\$ -				\$ -				\$ -							
Four Track Drill & Blast	Mile	\$	293,775,360				\$ -				\$ -				\$ -							
Four Track Mined (Soft Soil)	Mile	\$	158,400,000				\$ -				\$ -				\$ -							
Four Track TBM (<6 Miles)	Mile	\$	213,274,624												\$ -							
Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792												\$ -							
Four Track Cut & Cover Tunnel	Mile	\$	262,492,160			0.00	\$ -			0.00	\$ -				\$ -							
Grade Separations																						
1 Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352				\$ -				\$ -				\$ -							
Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528				\$ -				\$ -				\$ -							
2 Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680				\$ -				\$ -				\$ -							
3 Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568				\$ -				\$ -				\$ -							
4 Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520			0	\$ -			0	\$ -				\$ -							
5 Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216				\$ -				\$ -				\$ -							
Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816				\$ -				\$ -				\$ -							
6 Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328				\$ -				\$ -				\$ -							
7 Street Bridging HSR Trench	ea	\$	1,398,784				\$ -				\$ -			0	\$ -							
8 Minor Crossing Closures	ea	\$	87,040				\$ -				\$ -			0	\$ -							

COST ELEMENTS			UNIT	UNIT PRICE	At-Grade (2 Tracks)				At-Grade (4 Tracks)				Tunnel					
Subsection 1			Base: 2009 (3rd Quarter)		G				G				G					
					Start: 376 + 00	End: 450 + 00	1.40 Miles		Start: 376 + 00	End: 450 + 00	1.40 Miles		Start: 376 + 00	Start: 450 + 00	1.40 Miles			
Subsection Details							Quant.	Cost			Quant.	Cost			Quant.	Cost		
Double Track At-Grade (Mile)					Start: 376 + 00	End: 450 + 00	1.40 Miles		Start: 376 + 00	End: 450 + 00	1.40 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Double Track Tunnel (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 376 + 00	End: 450 + 00	1.40 Miles			
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Building Items			Each	\$														
1 Intermediate Passenger Stations							\$	-								\$	-	
2 Terminal Passenger Stations							\$	-								\$	-	
Caltrain Passenger Station - At-Grade					1	15,000,000			1	15,000,000						\$	-	
Caltrain Passenger Station - On Structure							\$	-								\$	-	
Caltrain Passenger Station - In Tunnel or Subway							\$	-						1	15,000,000	\$	-	
Caltrain Passenger Station - In Trench							\$	-								\$	-	
3 Maintenance Facility							\$	-								\$	-	
4 Parking - Structures	space						\$	-								\$	-	
5 Parking - At Grade	space						\$	-								\$	-	
Rail & Utility Relocation																		
1 Single Track Relocation (Temporary)	Mile				0.70	\$	1,400,627			0.70	\$	1,400,627				\$	-	
2 Single Track Relocation (Permanent)	Mile				0					0						\$	-	
3 Single Track Removal	Mile				0.70	\$	91,034			0.70	\$	91,034				\$	-	
4 Major Utility Relocations - Dense Urban	Mile				0.74	\$	1,145,733			0.74	\$	1,145,733				\$	-	
5 Major Utility Relocations - Urban	Mile						\$	-				\$	-			\$	-	
6 Major Utility Relocations - Dense Suburban	Mile						\$	-				\$	-			\$	-	
7 Major Utility Relocations - Suburban	Mile						\$	-				\$	-			\$	-	
8 Major Utility Relocations - Undeveloped	Mile						\$	-				\$	-			\$	-	
ROW (NOT INCLUDED)																		
ROW required for each segment																		
1 Dense Urban	Acre						\$	-				\$	-			\$	-	
2 Urban	Acre						\$	-				\$	-			\$	-	
3 Dense Suburban	Acre						\$	-				\$	-			\$	-	
4 Suburban	Acre						\$	-				\$	-			\$	-	
5 Undeveloped	Acre						\$	-				\$	-			\$	-	
ROW required for Temp. Construction Easement														0		\$	-	
1 Dense Urban	Acre						\$	-				\$	-			\$	-	
2 Urban	Acre						\$	-				\$	-			\$	-	
3 Dense Suburban	Acre						\$	-				\$	-			\$	-	
4 Suburban	Acre						\$	-				\$	-			\$	-	
5 Undeveloped	Acre						\$	-				\$	-			\$	-	
Right-of-Way Required for Stations, Maintenance & Parking Facilities																		
6 Dense Urban	Acre						\$	-				\$	-			\$	-	
7 Urban	Acre						\$	-				\$	-			\$	-	
8 Dense Suburban	Acre						\$	-				\$	-			\$	-	
9 Suburban	Acre						\$	-				\$	-			\$	-	
10 Undeveloped	Acre						\$	-				\$	-			\$	-	
Environmental Mitigation = 3% Line Costs							\$	622,995				\$	3,941,620			\$	7,365,288	
System Elements																		
1 Signaling (ATC)	Mile				1.40	\$	2,901,136			1.40	\$	2,901,136			1.40	\$	2,901,136	
2 Communications (w/ Fiber Optic Backbone)	Mile				1.40	\$	756,818			1.40	\$	756,818			1.40	\$	756,818	
3 Wayside Protection System	Mile				1.40	\$	151,364			1.40	\$	151,364			1.40	\$	151,364	
Electrification Items																		
1 Traction Power supply	Mile				1.40	\$	1,639,773			1.40	\$	1,639,773			1.40	\$	1,639,773	
2 Traction Power Distribution	Mile				1.40	\$	2,081,250			1.40	\$	2,081,250			1.40	\$	2,081,250	
Program Implementation Costs (per screening)							\$	28,919,828				\$	142,859,289			\$	260,405,226	
Program Implementation Costs							\$	7,374,556				\$	36,429,119			\$	66,403,333	
Contingencies (per screening) (25%)							\$	7,229,957				\$	35,714,822			\$	65,101,306	
Subtotal							\$	43,524,342				\$	215,003,230				\$	391,909,864
Subtotal (Rounded)							\$	44,000,000				\$	215,000,000				\$	392,000,000

Subsection 2	2A (4.2 miles)	2B (1.0 miles)	2C1 (1.0 miles)	2C2 (1.3 miles)					2D (1.2 miles)		
	At Grade	Berm	Berm	Aerial Viaduct	Berm	At Grade	Open Trench (HST Only)	Covered Trench/Tunnel (HST Only)	At Grade	Open Trench (HST Only)	Covered Trench (HST Only)
Capital Cost (\$2009 in Millions) does not include ROW	\$74	\$66	\$51	\$97 (3 tracks); \$93 (2 tracks)	\$95 (3 tracks); \$57 (2 tracks)	\$28 (3 tracks); \$26 (2 tracks)	\$133 (1 track); \$200 (2 tracks)	\$295 (1 track); \$331 (2 tracks)	\$37 (3 tracks); \$14 (2 tracks)	\$50 (1 track); \$181 (2 tracks)	\$293 (1 track); \$342 (2 tracks)
Acquisition Cost of Permanent ROW	Highest	Medium	Medium	Medium	Medium	Highest	Medium	Lowest	Highest	Medium	Lowest
Notes:	1. Existing 4 tracks extends from the Caltrain Bayshore Station to just north of the US 101 overpass. 2. Caltrain South San Francisco Station	1. Linden Ave and Scott St converted to undercrossings.	1. Assume Caltrain 2 track grade separation project completed (includes San Bruno Ave, San Mateo Ave, and Angus Ave converted to undercrossings).	3 tracks (2 Caltrain-1 HST) - 1. Three tracks on existing Caltrain alignment for approach to Caltrain and HST Millbrae station. <i>Must be combined with 1 track open trench or tunnel option.</i> 2 tracks (2 Caltrain)- 1. Two tracks on existing Caltrain alignment for approach to Caltrain Millbrae station. <i>Must be combined with 2 track open trench or tunnel option.</i>	3 tracks (2 Caltrain-1 HST) - 1. Three tracks on existing Caltrain alignment for approach to Caltrain and HST Millbrae station. <i>Must be combined with 1 track open trench or tunnel option.</i> 2 tracks (2 Caltrain)- 1. Two tracks on existing Caltrain alignment for approach to Caltrain Millbrae station. <i>Must be combined with 2 track open trench or tunnel option.</i>	3 tracks (2 Caltrain-1 HST) - 1. Three tracks on existing Caltrain alignment for approach to Caltrain and HST Millbrae station. <i>Must be combined with 1 track open trench or tunnel option.</i> 2 tracks (2 Caltrain)- 1. Two tracks on existing Caltrain alignment for approach to Caltrain Millbrae station. 3. Center St and Santa Paula (Pedestrian) converted to an overcrossings. <i>Must be combined with 2 track open trench or tunnel option.</i>	1 track - 1. One track on new alignment for approach to HST Millbrae station. <i>Must be combined with 3 track aerial viaduct, berm, or at grade option.</i> 2 tracks - 1. Two tracks on new alignment for approach to HST Millbrae station. <i>Must be combined with 2 track aerial viaduct, berm, or at grade option.</i>	1 track - 1. One track on new alignment for approach to HST Millbrae station. <i>Must be combined with 3 track aerial viaduct, berm, or at grade option.</i> 2 tracks - 1. Two tracks on new alignment for approach to HST Millbrae station. <i>Must be combined with 2 track aerial viaduct, berm, or at grade option.</i>	3 tracks (2 Caltrain-1 HST) - 1. Three tracks on existing Caltrain alignment for Caltrain and HST Millbrae station. <i>Must be combined with 1 track open trench or tunnel option.</i> 2. Caltrain Millbrae Station. 3. HST Millbrae Station (1 platform) 2 tracks (2 Caltrain)- 1. Two tracks on existing Caltrain alignment for Caltrain Millbrae station. <i>Must be combined with 2 track open trench or tunnel option.</i>	1 track - 1. One track on new alignment for HST Millbrae station. <i>Must be combined with 3 track at grade option.</i> 2. HST Millbrae station (1 platform) 2 tracks - 1. Two tracks on new alignment for HST Millbrae station. <i>Must be combined with 2 track at grade option.</i> 2. HST Millbrae station (2 platforms)	1 track - 1. One track on new alignment for HST Millbrae station. <i>Must be combined with 3 track at grade option.</i> 2. HST Millbrae station (1 platform) 2 tracks - 1. Two tracks on new alignment for HST Millbrae station. <i>Must be combined with 2 track at grade option.</i> 2. HST Millbrae station (2 platforms)

COST ELEMENTS			UNIT	UNIT PRICE	At-Grade			
Subsection 2				Base: 2009 (3rd Quarter)	A			
					Start: 450 + 00	End: 671 + 00	4.19 Miles	
Subsection Details						Quant.	Cost	
Double Track At-Grade (Mile)					Start: 450 + 00	End: 671 + 00	4.19 Miles	
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles	
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles	
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Elevated (Mile)					Start: 0 + 00		0.00 Miles	
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles	
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles	
Double Track Section - Total								
1 Double Track Section - At Grade	Mile	\$	2,100,224				4.19	\$ 8,790,710
2 Double Track Section - On Structure	Mile	\$	4,700,160				0.00	\$ -
3 Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160				0.00	\$ -
4 Double Track Section - In Trench	Mile	\$	4,700,160				0.00	\$ -
Four Track Section - Total								
Four-track Section - At Grade	Mile	\$	4,200,448				0.00	\$ -
Four-Track Section - On Structure	Mile	\$	9,400,320				0	\$ -
Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320				0	\$ -
Four-Track Section - In Trench	Mile	\$	9,400,320				0.00	\$ -
Single Track - Total								
5 Single Track Section - At Grade	Mile	\$	1,549,312				0	\$ -
6 Single Track Section - On structure	Mile	\$	2,350,080				0	\$ -
7 Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080				0	\$ -
8 Single Track Section - In Trench	Mile	\$	2,350,080				0	\$ -
9 Freight Double Track - At Grade	Mile	\$	2,839,552				0	\$ -
10 Freight Single Track - At Grade	Mile	\$	1,549,312				0	\$ -
Earthwork Items								
1 Site Preparation - Undeveloped	Acre	\$	9,216				32.98	\$ 303,921
2 Total Cut	CY	\$	6.00				0.00	\$ -
3 Total Fill	CY	\$	6.00				0.00	\$ -
4 Borrow	CY	\$	13.00				0.00	\$ -
5 Spoil	CY	\$	13.00				0.00	\$ -
6 Landscape erosion Control	Acre	\$	6,144				0.00	\$ -
7 Security Fencing (Both sides of ROW)	Mile	\$	144,384				0.00	\$ -
8 Special Drainage Facilities	5% Earthwork							\$ 15,196
Structures, Tunnels, Walls								
1 Standard Structure	Mile	\$	34,972,672				0.00	\$ -
2 High Structure	Mile	\$	40,424,448					\$ -
3 Long Span Structure	Mile	\$	61,919,232					\$ -
4 Waterway Crossing - Primary	Mile	\$	85,342,208					\$ -
5 Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408				0.02	\$ 1,743,360
6 Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264					\$ -
7 Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312					\$ -
8 Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896					\$ -
9 Double Track Drill & Blast	Mile	\$	146,887,680				0.00	\$ -
10 Double Track Mined (Soft Soil)	Mile	\$	79,200,000					\$ -
Double Track TBM (<6 Miles)	Mile	\$	106,637,312					\$ -
Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896					\$ -
11 Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952					\$ -
12 Crossovers	ea	\$	442,368					\$ -
13 Cut & Cover Double Track Tunnel	Mile	\$	131,246,080				0.00	\$ -
14 Trench Short	Mile	\$	78,843,904				0.00	\$ -
15 Trench Long	Mile	\$	57,524,224					\$ -
16 Mechanical & Electrical for Tunnels	Mile	\$	11,848,704					\$ -
17 Retaining Walls	Mile	\$	8,613,888				0.00	\$ -
18 Containment Walls	Mile	\$	5,907,456				0.00	\$ -
19 Single Track Cut and Cover Subway	Mile	\$	131,246,080					\$ -
Four Track Drill & Blast	Mile	\$	293,775,360					\$ -
Four Track Mined (Soft Soil)	Mile	\$	158,400,000					\$ -
Four Track TBM (<6 Miles)	Mile	\$	213,274,624					\$ -
Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792					\$ -
Four Track Cut & Cover Tunnel	Mile	\$	262,492,160				0.00	\$ -
Grade Separations								
1 Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352					\$ -
Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528					\$ -
2 Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680					\$ -
3 Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568					\$ -
4 Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520				0	\$ -
5 Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216					\$ -
Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816				0	\$ -
6 Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328					\$ -
7 Street Bridging HSR Trench	ea	\$	1,398,784					\$ -
8 Minor Crossing Closures	ea	\$	87,040					\$ -
Building Items								

COST ELEMENTS			UNIT	UNIT PRICE	Berm			
Subsection 2				Base: 2009 (3rd Quarter)	B			
					Start: 671 + 00	End: 724 + 00	1.00 Miles	
Subsection Details							Quant.	Cost
Double Track At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles	
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Elevated (Mile)					Start: 671 + 00	End: 724 + 00	1.00 Miles	
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles	
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles	
Double Track Section - Total								
1	Double Track Section - At Grade	Mile	\$	2,100,224			0.00	\$ -
2	Double Track Section - On Structure	Mile	\$	4,700,160			0.00	\$ -
3	Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160			0.00	\$ -
4	Double Track Section - In Trench	Mile	\$	4,700,160			0.00	\$ -
Four Track Section - Total								
	Four-track Section - At Grade	Mile	\$	4,200,448			0.50	\$ 2,108,179
	Four-Track Section - On Structure	Mile	\$	9,400,320			0.50	\$ 4,717,964
	Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320			0.00	\$ -
	Four-Track Section - In Trench	Mile	\$	9,400,320			0.00	\$ -
Single Track - Total								
5	Single Track Section - At Grade	Mile	\$	1,549,312			0.00	\$ -
6	Single Track Section - On structure	Mile	\$	2,350,080			0.00	\$ -
7	Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080			0.00	\$ -
8	Single Track Section - In Trench	Mile	\$	2,350,080			0.00	\$ -
9	Freight Double Track - At Grade	Mile	\$	2,839,552			0.00	\$ -
10	Freight Single Track - At Grade	Mile	\$	1,549,312			0.00	\$ -
Earthwork Items								
1	Site Preparation - Undeveloped	Acre	\$	9,216			13.38	\$ 123,345
2	Total Cut	CY	\$	6.00			0.00	\$ -
3	Total Fill	CY	\$	6.00			196296.30	\$ 1,177,778
4	Borrow	CY	\$	13.00			196296.30	\$ 2,551,852
5	Spoil	CY	\$	13.00			0.00	\$ -
6	Landscape erosion Control	Acre	\$	6,144			0.00	\$ -
7	Security Fencing (Both sides of ROW)	Mile	\$	144,384			0.00	\$ -
8	Special Drainage Facilities	5% Earthwork						\$ 192,649
Structures, Tunnels, Walls								
1	Standard Structure	Mile	\$	34,972,672			0.50	\$ 17,552,572
2	High Structure	Mile	\$	40,424,448				\$ -
3	Long Span Structure	Mile	\$	61,919,232				\$ -
4	Waterway Crossing - Primary	Mile	\$	85,342,208				\$ -
5	Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408				\$ -
6	Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264				\$ -
7	Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312				\$ -
8	Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896				\$ -
9	Double Track Drill & Blast	Mile	\$	146,887,680			0.00	\$ -
10	Double Track Mined (Soft Soil)	Mile	\$	79,200,000				\$ -
	Double Track TBM (<6 Miles)	Mile	\$	106,637,312				
	Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896				
11	Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952				\$ -
12	Crossovers	ea	\$	442,368				\$ -
13	Cut & Cover Double Track Tunnel	Mile	\$	131,246,080			0.00	\$ -
14	Trench Short	Mile	\$	78,843,904			0.00	\$ -
15	Trench Long	Mile	\$	57,524,224				\$ -
16	Mechanical & Electrical for Tunnels	Mile	\$	11,848,704				\$ -
17	Retaining Walls	Mile	\$	8,613,888			0.50	\$ 4,323,258
18	Containment Walls	Mile	\$	5,907,456			0.00	\$ -
19	Single Track Cut and Cover Subway	Mile	\$	131,246,080				\$ -
	Four Track Drill & Blast	Mile	\$	293,775,360				\$ -
	Four Track Mined (Soft Soil)	Mile	\$	158,400,000				\$ -
	Four Track TBM (<6 Miles)	Mile	\$	213,274,624				
	Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792				
	Four Track Cut & Cover Tunnel	Mile	\$	262,492,160			0.00	\$ -
Grade Separations								
1	Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352				\$ -
	Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528			0	\$ -
2	Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680			2	\$ 5,519,360
3	Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568				\$ -
4	Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520				\$ -
5	Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216				\$ -
	Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816				\$ -
6	Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328				\$ -
7	Street Bridging HSR Trench	ea	\$	1,398,784				\$ -
8	Minor Crossing Closures	ea	\$	87,040				\$ -
Building Items								

COST ELEMENTS		UNIT	UNIT PRICE	Berm		
Subsection 2			Base: 2009 (3rd Quarter)	B		
				Start: 671 + 00	End: 724 + 00	1.00 Miles
Subsection Details						Quant. Cost
Double Track At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles
Double Track Elevated (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles
Double Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles
Four Track Elevated (Mile)				Start: 671 + 00	End: 724 + 00	1.00 Miles
Four Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles
Four Track Trench (Mile)				Start: 0 + 00		0.00 Miles
1 Intermediate Passenger Stations	Each	\$	-			\$ -
2 Terminal Passenger Stations	Each	\$	-			\$ -
Caltrain Passenger Station - At-Grade	Each	\$	15,000,000			\$ -
Caltrain Passenger Station - On Structure	Each	\$	15,000,000			\$ -
Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000			\$ -
Caltrain Passenger Station - In Trench	Each	\$	15,000,000			\$ -
3 Maintenance Facility	Each	\$	123,921,884			\$ -
4 Parking - Structures	space	\$	-			\$ -
5 Parking - At Grade	space	\$	-			\$ -
Rail & Utility Relocation						
1 Single Track Relocation (Temporary)	Mile	\$	2,000,896			\$ -
2 Single Track Relocation (Permanent)	Mile	\$	2,000,896			\$ -
3 Single Track Removal	Mile	\$	130,048			\$ -
4 Major Utility Relocations - Dense Urban	Mile	\$	1,548,288			\$ -
5 Major Utility Relocations - Urban	Mile	\$	1,084,416			\$ -
6 Major Utility Relocations - Dense Suburban	Mile	\$	775,168			\$ -
7 Major Utility Relocations - Suburban	Mile	\$	464,896			\$ -
8 Major Utility Relocations - Undeveloped	Mile	\$	30,720			\$ -
ROW (Not Included)						
ROW required for each segment						
1 Dense Urban	Acre	\$	2,786,321			\$ -
2 Urban	Acre	\$	1,371,510			\$ -
3 Dense Suburban	Acre	\$	908,134			\$ -
4 Suburban	Acre	\$	208,418			\$ -
5 Undeveloped	Acre	\$	3,642			\$ -
ROW required for Temp. Construction Easement						
1 Dense Urban	Acre					\$ -
2 Urban	Acre					\$ -
3 Dense Suburban	Acre					\$ -
4 Suburban	Acre					\$ -
5 Undeveloped	Acre					\$ -
Right-of-Way Required for Stations, Maintenance & Parking Facilities						
6 Dense Urban	Acre	\$	2,786,321			\$ -
7 Urban	Acre	\$	1,371,510			\$ -
8 Dense Suburban	Acre	\$	908,134			\$ -
9 Suburban	Acre	\$	208,418			\$ -
10 Undeveloped	Acre	\$	3,642			\$ -
Environmental Mitigation = 3% Line Costs						\$ 1,148,009
System Elements						
1 Signaling (ATC)	Mile	\$	2,070,000			1.00 \$ 2,077,841
2 Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			1.00 \$ 542,045
3 Wayside Protection System	Mile	\$	108,000			1.00 \$ 108,409
Electrification Items						
1 Traction Power supply	Mile	\$	117,000			1.00 \$ 117,443
2 Traction Power Distribution	Mile	\$	1,485,000			1.00 \$ 1,490,625
Subtotal						\$ 43,751,330
Program Implementation Costs (per screening)						\$ 11,156,589
Program Implementation Costs						
Contingencies (per screening) (25%)						\$ 10,937,832
Subtotal						\$ 65,845,751
Subtotal (Rounded)						\$ 66,000,000

COST ELEMENTS			UNIT	UNIT PRICE	Berm		At-Grade (2 Tracks)				At-Grade (3 Tracks)				Elevated Viaduct (2 Tracks)				
Subsection 2			Base: 2009 (3rd Quarter)	C1		C2		C2		C2		C2							
				Start: 724 + 00	End: 775 + 00	0.97 Miles		Start: 775 + 00	End: 843 + 00	1.29 Miles		Start: 775 + 00	End: 843 + 00	1.29 Miles					
Subsection Details					Quant.	Cost			Quant.	Cost			Quant.	Cost			Quant.	Cost	
Double Track At-Grade (Mile) (Three track where noted)				Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 775 + 00	End: 843 + 00	1.29 Miles		Start: 775 + 00	End: 843 + 00	1.29 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)				Start: 724 + 00	End: 775 + 00	0.97 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 775 + 00	End: 843 + 00	1.29 Miles	
Double Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Elevated (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Single Track At-Grade (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Single Track Elevated (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Single Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Single Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Section - Total																			
1 Double Track Section - At Grade	Mile	\$	2,100,224			0.00	\$ -			1.29	\$ 2,704,834			0.00	\$ -			0.00	\$ -
2 Double Track Section - On Structure	Mile	\$	4,700,160			0.97	\$ 4,539,927			0.00	\$ -			0.00	\$ -			1.29	\$ 6,053,236
3 Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
4 Double Track Section - In Trench	Mile	\$	4,700,160			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
Three Track Section - Total (See note)																			
Three-track Section - At Grade	Mile	\$	3,150,336			0.00	\$ -			0.00	\$ -			1.29	\$ 4,057,251			0.00	\$ -
Three-Track Section - On Structure	Mile	\$	7,050,240			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
Three-Track Section - In Tunnel or Subway	Mile	\$	7,050,240			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
Three-Track Section - In Trench	Mile	\$	7,050,240			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
Four Track Section - Total																			
Four-track Section - At Grade	Mile	\$	4,200,448			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
Four-Track Section - On Structure	Mile	\$	9,400,320			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
Four-Track Section - In Trench	Mile	\$	9,400,320			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
Single Track - Total																			
5 Single Track Section - At Grade	Mile	\$	1,549,312			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
6 Single Track Section - On structure	Mile	\$	2,350,080			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
7 Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
8 Single Track Section - In Trench	Mile	\$	2,350,080			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
9 Freight Double Track - At Grade	Mile	\$	2,839,552			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
10 Freight Single Track - At Grade	Mile	\$	1,549,312			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
Earthwork Items																			
1 Site Preparation - Undeveloped	Acre	\$	9,216			7.61	\$ 70,136			10.15	\$ 93,514			10.15	\$ 93,514			10.15	\$ 93,514
2 Total Cut	CY	\$	6.00			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
3 Total Fill	CY	\$	6.00			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
4 Borrow	CY	\$	13.00			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
5 Spoil	CY	\$	13.00			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
6 Landscape erosion Control	Acre	\$	6,144			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
7 Security Fencing (Both sides of ROW)	Mile	\$	144,384			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
8 Special Drainage Facilities	5% Earthwork					\$	3,507			\$	4,676			\$	4,676			\$	4,676
Structures, Tunnels, Walls																			
1 Standard Structure	Mile	\$	34,972,672			\$	-			0.00	\$ -			0.00	\$ -			1.29	\$ 45,040,562
2 High Structure	Mile	\$	40,424,448			\$	-			\$	-			\$	-			\$	-
3 Long Span Structure	Mile	\$	61,919,232			\$	-			\$	-			\$	-			\$	-
4 Waterway Crossing - Primary	Mile	\$	85,342,208			\$	-			\$	-			\$	-			\$	-
5 Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408			\$	-			\$	-			\$	-			\$	-
6 Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264			\$	-			\$	-			\$	-			\$	-
7 Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312			\$	-			\$	-			\$	-			\$	-
8 Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896			\$	-			\$	-			\$	-			\$	-
9 Double Track Drill & Blast	Mile	\$	146,887,680			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
10 Double Track Mined (Soft Soil)	Mile	\$	79,200,000			\$	-			\$	-			\$	-			\$	-
Double Track TBM (<6 Miles)	Mile	\$	106,637,312																
Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896																
11 Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952			\$	-			\$	-			\$	-			\$	-
12 Crossovers	ea	\$	442,368			\$	-			\$	-			\$	-			\$	-
13 Cut & Cover Double Track Tunnel	Mile	\$	131,246,080			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
14 Trench Short (assume cost for 1 track is 60% of unit cost)	Mile	\$	78,843,904			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
15 Trench Long	Mile	\$	57,524,224			\$	-			\$	-			\$	-			\$	-
16 Mechanical & Electrical for Tunnels	Mile	\$	11,848,704			\$	-			\$	-			\$	-			\$	-
17 Retaining Walls	Mile	\$	8,613,888			0.97	\$ 8,320,233			0.00	\$ -			0.00	\$ -			0.00	\$ -
18 Containment Walls	Mile	\$	5,907,456			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
19 Single Track Cut and Cover Subway	Mile	\$	131,246,080			\$	-			\$	-			\$	-			\$	-
Four Track Drill & Blast	Mile	\$	293,775,360			\$	-			\$	-			\$	-			\$	-
Four Track Mined (Soft Soil)	Mile	\$	158,400,000			\$	-			\$	-			\$	-			\$	-
Four Track TBM (<6 Miles)	Mile	\$	213,274,624																
Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792																
Four Track Cut & Cover Tunnel	Mile	\$	262,492,160			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -

COST ELEMENTS			UNIT	UNIT PRICE	Berm		At-Grade (2 Tracks)				At-Grade (3 Tracks)				Elevated Viaduct (2 Tracks)										
Subsection 2				Base: 2009 (3rd Quarter)	C1		C2		C2		C2		C2												
					Start: 724 + 00	End: 775 + 00	0.97 Miles		Start: 775 + 00	End: 843 + 00	1.29 Miles		Start: 775 + 00	End: 843 + 00	1.29 Miles		Start: 775 + 00	End: 843 + 00	1.29 Miles						
Subsection Details						Quant.	Cost			Quant.	Cost			Quant.	Cost			Quant.	Cost						
Double Track At-Grade (Mile) (Three track where noted)						Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 775 + 00	End: 843 + 00	1.29 Miles		Start: 775 + 00	End: 843 + 00	1.29 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles					
Double Track Elevated (Mile)						Start: 724 + 00	End: 775 + 00	0.97 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 775 + 00	End: 843 + 00	1.29 Miles					
Double Track Tunnel (Mile)						Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles					
Double Track Trench (Mile)						Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles					
Four Track Construction/Reconstruction At-Grade (Mile)						Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles					
Four Track Elevated (Mile)						Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles					
Four Track Tunnel (Mile)						Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles					
Four Track Trench (Mile)						Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles					
Single Track At-Grade (Mile)						Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles					
Single Track Elevated (Mile)						Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles					
Single Track Tunnel (Mile)						Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles					
Single Track Trench (Mile)						Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles					
3 Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)				ea	\$	2,029,568			\$	-			\$	-			\$	-		\$	-				
4 Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)				ea	\$	3,563,520				-		2	\$	7,127,040			2	\$	7,127,040		\$	-			
5 Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)				ea	\$	3,593,216				-											\$	-			
Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)				ea	\$	2,850,816				-		0	\$	-			0	\$	-			\$	-		
6 Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)				ea	\$	3,171,328				-												\$	-		
7 Street Bridging HSR Trench				ea	\$	1,398,784				-												\$	-		
8 Minor Crossing Closures				ea	\$	87,040				-		2	\$	174,080			1	\$	87,040		0	\$	-		
Building Items																									
1 Intermediate Passenger Stations				Each	\$	-				-												\$	-		
2 Terminal Passenger Stations				Each	\$	-				-												\$	-		
Caltrain Passenger Station - At-Grade				Each	\$	15,000,000	1	\$	15,000,000		0	\$	-				0	\$	-		0	\$	-		
Caltrain Passenger Station - On Structure				Each	\$	15,000,000				-												\$	-		
Caltrain Passenger Station - In Tunnel or Subway				Each	\$	15,000,000				-												\$	-		
Caltrain Passenger Station - In Trench				Each	\$	15,000,000				-												\$	-		
3 Maintenance Facility				Each	\$	123,921,884				-												\$	-		
4 Parking - Structures				space	\$	-				-												\$	-		
5 Parking - At Grade				space	\$	-				-												\$	-		
Rail & Utility Relocation																									
1 Single Track Relocation (Temporary)				Mile	\$	2,000,896				-												\$	-		
2 Single Track Relocation (Permanent)				Mile	\$	2,000,896				-												\$	-		
3 Single Track Removal				Mile	\$	130,048				-												\$	-		
4 Major Utility Relocations - Dense Urban				Mile	\$	1,548,288				-												\$	-		
5 Major Utility Relocations - Urban				Mile	\$	1,084,416				-												\$	-		
6 Major Utility Relocations - Dense Suburban				Mile	\$	775,168				-												\$	-		
7 Major Utility Relocations - Suburban				Mile	\$	464,896				-												\$	-		
8 Major Utility Relocations - Undeveloped				Mile	\$	30,720				-												\$	-		
ROW (Not Included)																									
ROW required for each segment																									
1 Dense Urban				Acre	\$	2,786,321				-												\$	-		
2 Urban				Acre	\$	1,371,510				-												\$	-		
3 Dense Suburban				Acre	\$	908,134				-												\$	-		
4 Suburban				Acre	\$	208,418				-												\$	-		
5 Undeveloped				Acre	\$	3,642				-												\$	-		
ROW required for Temp. Construction Easement																									
1 Dense Urban				Acre						-													\$	-	
2 Urban				Acre						-													\$	-	
3 Dense Suburban				Acre						-													\$	-	
4 Suburban				Acre						-													\$	-	
5 Undeveloped				Acre						-													\$	-	
Right-of-Way Required for Stations, Maintenance & Parking Facilities																									
6 Dense Urban				Acre	\$	2,786,321				-													\$	-	
7 Urban				Acre	\$	1,371,510				-													\$	-	
8 Dense Suburban				Acre	\$	908,134				-													\$	-	
9 Suburban				Acre	\$	208,418				-													\$	-	
10 Undeveloped				Acre	\$	3,642				-													\$	-	
Environmental Mitigation = 3% Line Costs									\$	838,014				\$	303,124					\$	341,086			\$	1,535,760
System Elements																									
1 Signaling (ATC)				Mile	\$	2,070,000		0.97	\$	1,999,432		1.29	\$	2,665,909		1.29	\$	2,665,909		1.29	\$	2,665,909			
2 Communications (w/ Fiber Optic Backbone)				Mile	\$	540,000		0.97	\$	521,591		1.29	\$	695,455		1.29	\$	695,455		1.29	\$	695,455			
3 Wayside Protection System				Mile	\$	108,000		0.97	\$	104,318		1.29	\$	139,091		1.29	\$	139,091		1.29	\$	139,091			
Electrification Items																									
1 Traction Power supply				Mile	\$	1,170,000		0.97	\$	1,130,114		1.29	\$	1,506,818		1.29	\$	1,506,818		1.29	\$	1,506,818			
2 Traction Power Distribution				Mile	\$	1,485,000		0.97	\$	1,434,375		1.29	\$	1,912,500		1.29	\$	1,912,500		2.52	\$	3,742,200			
									\$	33,961,646			\$	17,327,041			\$	18,630,379			\$	61,477,221			
Program Implementation Costs (per screening)									\$	8,660,220			\$	4,418,395			\$	4,750,747			\$	15,676,691			
Program Implementation Costs																									
Contingencies (per screening) (25%)									\$	8,490,411			\$	4,331,760			\$	4,657,595			\$	15,369,305			
Subtotal									\$	51,112,277			\$	26,077,196			\$	28,038,720			\$	92,523,217			
Subtotal (Rounded)									\$	51,000,000			\$	26,000,000			\$	28,000,000			\$	93,000,000			

COST ELEMENTS			UNIT	UNIT PRICE	Elevated Viaduct (3 Tracks)				Berm (2 Tracks)				Berm (3 Tracks)				Open Trench (1 Track)			
Subsection 2				Base: 2009 (3rd Quarter)	C2				C2				C2				C2			
					Start: 775 + 00	End: 843 + 00	1.29 Miles		Start: 775 + 00	End: 843 + 00	1.29 Miles		Start: 775 + 00	End: 843 + 00	1.29 Miles		Start: 775 + 00	End: 843 + 00	1.29 Miles	
Subsection Details						Quant.	Cost			Quant.	Cost			Quant.	Cost			Quant.	Cost	
Double Track At-Grade (Mile) (Three track where noted)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 775 + 00	End: 843 + 00	1.29 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Elevated (Mile)					Start: 775 + 00	End: 843 + 00	1.29 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 775 + 00	End: 843 + 00	1.29 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Single Track At-Grade (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Single Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Single Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Single Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 775 + 00	End: 843 + 00	1.29 Miles	
Double Track Section - Total																				
1 Double Track Section - At Grade	Mile	\$	2,100,224				0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
2 Double Track Section - On Structure	Mile	\$	4,700,160				0.00	\$ -			1.29	\$ 6,053,236			0.00	\$ -			0.00	\$ -
3 Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160				0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
4 Double Track Section - In Trench	Mile	\$	4,700,160				0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
Three Track Section - Total (See note)																				
Three-track Section - At Grade	Mile	\$	3,150,336				0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
Three-Track Section - On Structure	Mile	\$	7,050,240				1.29	\$ 9,079,855			0.00	\$ -			1.29	\$ 9,079,855			0.00	\$ -
Three-Track Section - In Tunnel or Subway	Mile	\$	7,050,240				0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
Three-Track Section - In Trench	Mile	\$	7,050,240				0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
Four Track Section - Total																				
Four-track Section - At Grade	Mile	\$	4,200,448				0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
Four-Track Section - On Structure	Mile	\$	9,400,320				0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320				0.00	\$ -			0.00	\$ -			0.00	\$ -			0	\$ -
Four-Track Section - In Trench	Mile	\$	9,400,320				0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
Single Track - Total																				
5 Single Track Section - At Grade	Mile	\$	1,549,312				0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
6 Single Track Section - On structure	Mile	\$	2,350,080				0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00 Miles	\$ -
7 Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080				0.00	\$ -			0.00	\$ -			0.00	\$ -			0	\$ -
8 Single Track Section - In Trench	Mile	\$	2,350,080				0.00	\$ -			0.00	\$ -			0.00	\$ -			1.29	\$ 3,026,618
9 Freight Double Track - At Grade	Mile	\$	2,839,552				0.00	\$ -			0.00	\$ -			0.00	\$ -			0	\$ -
10 Freight Single Track - At Grade	Mile	\$	1,549,312				0.00	\$ -			0.00	\$ -			0.00	\$ -			0	\$ -
Earthwork Items																				
1 Site Preparation - Undeveloped	Acre	\$	9,216				17.17	\$ 158,255			10.15	\$ 93,514			17.17	\$ 158,255			10.15	\$ 93,514
2 Total Cut	CY	\$	6.00				0.00	\$ -			1385185.19	\$ 8,311,111			0.00	\$ -			0.00	\$ -
3 Total Fill	CY	\$	6.00				0.00	\$ -			503703.70	\$ 3,022,222			0.00	\$ -			0.00	\$ -
4 Borrow	CY	\$	13.00				0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
5 Spoil	CY	\$	13.00				0.00	\$ -			881481.48	\$ 11,459,259			0.00	\$ -			0.00	\$ -
6 Landscape erosion Control	Acre	\$	6,144				0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
7 Security Fencing (Both sides of ROW)	Mile	\$	144,384				0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
8 Special Drainage Facilities	5% Earthwork						\$ 7,913				\$ 1,144,305				\$ 7,913				\$ 4,676	
Structures, Tunnels, Walls																				
1 Standard Structure	Mile	\$	34,972,672				1.29	\$ 45,040,562			0.00	\$ -			1.29	\$ 45,040,562			0.00	\$ -
2 High Structure	Mile	\$	40,424,448					\$ -				\$ -				\$ -				\$ -
3 Long Span Structure	Mile	\$	61,919,232					\$ -				\$ -				\$ -				\$ -
4 Waterway Crossing - Primary	Mile	\$	85,342,208					\$ -				\$ -				\$ -				\$ -
5 Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408					\$ -				\$ -				\$ -				\$ -
6 Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264					\$ -				\$ -				\$ -				\$ -
7 Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312					\$ -				\$ -				\$ -				\$ -
8 Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896					\$ -				\$ -				\$ -				\$ -
9 Double Track Drill & Blast	Mile	\$	146,887,680				0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
10 Double Track Mined (Soft Soil)	Mile	\$	79,200,000					\$ -				\$ -				\$ -				\$ -
Double Track TBM (<6 Miles)	Mile	\$	106,637,312																	
Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896																	
11 Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952					\$ -				\$ -				\$ -				\$ -
12 Crossovers	ea	\$	442,368					\$ -				\$ -				\$ -				\$ -
13 Cut & Cover Double Track Tunnel	Mile	\$	131,246,080				0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
14 Trench Short (assume cost for 1 track is 60% of unit cost)	Mile	\$	78,843,904				0.00	\$ -			0.00	\$ -			0.00	\$ -			1.29	\$ 60,924,835
15 Trench Long	Mile	\$	57,524,224					\$ -				\$ -				\$ -			0.00	\$ -
16 Mechanical & Electrical for Tunnels	Mile	\$	11,848,704					\$ -				\$ -				\$ -			0.00	\$ -
17 Retaining Walls	Mile	\$	8,613,888				0.00	\$ -			0.00	\$ -			0.00	\$ -			1.29	\$ 11,093,644
18 Containment Walls	Mile	\$	5,907,456				0.00	\$ -			0.00	\$ -			0.00	\$ -			1.29	\$ 7,608,087
19 Single Track Cut and Cover Subway	Mile	\$	131,246,080					\$ -				\$ -				\$ -				\$ -
Four Track Drill & Blast	Mile	\$	293,7																	

COST ELEMENTS			UNIT	UNIT PRICE	Elevated Viaduct (3 Tracks)				Berm (2 Tracks)				Berm (3 Tracks)				Open Trench (1 Track)						
Subsection 2			Base: 2009 (3rd Quarter)	C2				C2				C2				C2							
				Start: 775 + 00	End: 843 + 00	1.29 Miles		Start: 775 + 00	End: 843 + 00	1.29 Miles		Start: 775 + 00	End: 843 + 00	1.29 Miles		Start: 775 + 00	End: 843 + 00	1.29 Miles					
Subsection Details						Quant.	Cost			Quant.	Cost			Quant.	Cost			Quant.	Cost				
Double Track At-Grade (Mile) (Three track where noted)						Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Double Track Elevated (Mile)						Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 775 + 00	End: 843 + 00	1.29 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00		0.00 Miles			
Double Track Tunnel (Mile)						Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Double Track Trench (Mile)						Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Construction/Reconstruction At-Grade (Mile)						Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Elevated (Mile)						Start: 775 + 00	End: 843 + 00	1.29 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 775 + 00	End: 843 + 00	1.29 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Tunnel (Mile)						Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Trench (Mile)						Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Single Track At-Grade (Mile)						Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Single Track Elevated (Mile)						Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Single Track Tunnel (Mile)						Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Single Track Trench (Mile)						Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 775 + 00	End: 843 + 00	1.29 Miles			
3	Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568				\$	-				\$	-			\$	-		\$	-		
4	Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520				\$	-				\$	-			\$	-		\$	-		
5	Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216				\$	-				\$	-			\$	-		\$	-		
	Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816				\$	-				\$	-			\$	-		\$	-		
6	Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328				\$	-				\$	-			\$	-		\$	-		
7	Street Bridging HSR Trench	ea	\$	1,398,784				\$	-				\$	-			\$	-	0	\$	-		
8	Minor Crossing Closures	ea	\$	87,040			0	\$	-				\$	-			\$	-	1	\$	87,040		
Building Items																							
1	Intermediate Passenger Stations	Each	\$	-				\$	-				\$	-			\$	-		\$	-		
2	Terminal Passenger Stations	Each	\$	-				\$	-				\$	-			\$	-	1	\$	-		
	Caltrain Passenger Station - At-Grade	Each	\$	15,000,000			0	\$	-			0	\$	-			\$	-	0	\$	-		
	Caltrain Passenger Station - On Structure	Each	\$	15,000,000				\$	-				\$	-			\$	-		\$	-		
	Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000				\$	-				\$	-			\$	-		\$	-		
	Caltrain Passenger Station - In Trench	Each	\$	15,000,000				\$	-				\$	-			\$	-		\$	-		
3	Maintenance Facility	Each	\$	123,921,884				\$	-				\$	-			\$	-		\$	-		
4	Parking - Structures	space	\$	-				\$	-				\$	-			\$	-		\$	-		
5	Parking - At Grade	space	\$	-				\$	-				\$	-			\$	-		\$	-		
Rail & Utility Relocation																							
1	Single Track Relocation (Temporary)	Mile	\$	2,000,896				\$	-				\$	-			\$	-		\$	-		
2	Single Track Relocation (Permanent)	Mile	\$	2,000,896				\$	-				\$	-			\$	-		\$	-		
3	Single Track Removal	Mile	\$	130,048				\$	-				\$	-			\$	-		\$	-		
4	Major Utility Relocations - Dense Urban	Mile	\$	1,548,288				\$	-				\$	-			\$	-		\$	-		
5	Major Utility Relocations - Urban	Mile	\$	1,084,416				\$	-				\$	-			\$	-		\$	-		
6	Major Utility Relocations - Dense Suburban	Mile	\$	775,168				\$	-				\$	-			\$	-		\$	-		
7	Major Utility Relocations - Suburban	Mile	\$	464,896				\$	-				\$	-			\$	-		\$	-		
8	Major Utility Relocations - Undeveloped	Mile	\$	30,720				\$	-				\$	-			\$	-		\$	-		
ROW (Not Included)																							
ROW required for each segment																							
1	Dense Urban	Acre	\$	2,786,321				\$	-				\$	-			\$	-		\$	-		
2	Urban	Acre	\$	1,371,510				\$	-				\$	-			\$	-		\$	-		
3	Dense Suburban	Acre	\$	908,134				\$	-				\$	-			\$	-		\$	-		
4	Suburban	Acre	\$	208,418				\$	-				\$	-			\$	-		\$	-		
5	Undeveloped	Acre	\$	3,642				\$	-				\$	-			\$	-		\$	-		
ROW required for Temp. Construction Easement																							
1	Dense Urban	Acre						\$	-				\$	-			\$	-		\$	-		
2	Urban	Acre						\$	-				\$	-			\$	-		\$	-		
3	Dense Suburban	Acre						\$	-				\$	-			\$	-		\$	-		
4	Suburban	Acre						\$	-				\$	-			\$	-		\$	-		
5	Undeveloped	Acre						\$	-				\$	-			\$	-		\$	-		
Right-of-Way Required for Stations, Maintenance & Parking Facilities																							
6	Dense Urban	Acre	\$	2,786,321				\$	-				\$	-			\$	-		\$	-		
7	Urban	Acre	\$	1,371,510				\$	-				\$	-			\$	-		\$	-		
8	Dense Suburban	Acre	\$	908,134				\$	-				\$	-			\$	-		\$	-		
9	Suburban	Acre	\$	208,418				\$	-				\$	-			\$	-		\$	-		
10	Undeveloped	Acre	\$	3,642				\$	-				\$	-			\$	-		\$	-		
Environmental Mitigation = 3% Line Costs								\$	1,628,598				\$	902,509			\$	1,628,598			\$	2,485,152	
System Elements																							
1	Signaling (ATC)	Mile	\$	2,070,000			1.29	\$	2,665,909			1.29	\$	2,665,909			1.29	\$	2,665,909		1.29	\$	695,455
2	Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			1.29	\$	695,455			1.29	\$	695,455			1.29	\$	695,455		1.29	\$	139,091
3	Wayside Protection System	Mile	\$	108,000			1.29	\$	139,091			1.29	\$	139,091			1.29	\$	139,091			\$	-
Electrification Items																							
1	Traction Power supply	Mile	\$	1,170,000			1.29	\$	1,506,818			1.29	\$	1,506,818			1.29	\$	1,506,818		1.29	\$	1,912,500
2	Traction Power Distribution	Mile	\$	1,485,000			2.52	\$	3,742,200			1.29	\$	1,912,500			1.29	\$	1,912,500			\$	-
								\$	64,664,654				\$	37,905,931				\$	62,834,954			\$	88,070,612
Program Implementation Costs (per screening)								\$	16,489,487				\$	9,666,012				\$	16,022,913			\$	22,458,006
Program Implementation Costs																							
Contingencies (per screening) (25%)								\$	16,166,164				\$	9,476,483			\$	15,708,739			\$	22,017,653	
Subtotal								\$	97,320,305				\$	57,048,425			\$	94,566,607			\$	132,546,270	
Subtotal (Rounded)								\$	97,000,000				\$	57,000,000			\$	95,000,000			\$	133,000,000	

COST ELEMENTS			UNIT	UNIT PRICE	Open Trench (2 Tracks)				Covered Trench (1 Track) (HST only)				Covered Trench (2 Tracks) (HST only)			
Subsection 2				Base: 2009 (3rd Quarter)	C2				C2				C2			
					Start: 775 + 00	End: 843 + 00	1.29 Miles		Start: 775 + 00	End: 843 + 00	1.29 Miles		Start: 775 + 00	End: 843 + 00	1.29 Miles	
Subsection Details						Quant.	Cost			Quant.	Cost			Quant.	Cost	
Double Track At-Grade (Mile) (Three track where noted)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 775 + 00	End: 843 + 00	1.29 Miles	
Double Track Trench (Mile)					Start: 775 + 00	End: 843 + 00	1.29 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Elevated (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles				0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Trench (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Single Track At-Grade (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00		0.00 Miles	
Single Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Single Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Single Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 775 + 00	End: 843 + 00	1.29 Miles		Start: 0 + 00		0.00 Miles	
Double Track Section - Total																
1 Double Track Section - At Grade	Mile	\$	2,100,224				0.00	\$ -			0.00	\$ -			0.00	\$ -
2 Double Track Section - On Structure	Mile	\$	4,700,160				0.00	\$ -			0.00	\$ -			0.00	\$ -
3 Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160				0.00	\$ -			0.00	\$ -			1.29	\$ 6,053,236
4 Double Track Section - In Trench	Mile	\$	4,700,160				1.29	\$ 6,053,236			0.00	\$ -			0.00	\$ -
Three Track Section - Total (See note)																
Three-track Section - At Grade	Mile	\$	3,150,336				0.00	\$ -			0.00	\$ -			0.00	\$ -
Three-Track Section - On Structure	Mile	\$	7,050,240				0.00	\$ -			0.00	\$ -			0.00	\$ -
Three-Track Section - In Tunnel or Subway	Mile	\$	7,050,240				0.00	\$ -			0.00	\$ -			0.00	\$ -
Three-Track Section - In Trench	Mile	\$	7,050,240				0.00	\$ -			0.00	\$ -			0.00	\$ -
Four Track Section - Total																
Four-track Section - At Grade	Mile	\$	4,200,448				0.00	\$ -			0.00	\$ -			0.00	\$ -
Four-Track Section - On Structure	Mile	\$	9,400,320				0.00	\$ -			0.00	\$ -			0.00	\$ -
Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320				0	\$ -			0.00	\$ -			0.00	\$ -
Four-Track Section - In Trench	Mile	\$	9,400,320				0.00	\$ -			0	\$ -			0	\$ -
Single Track - Total																
5 Single Track Section - At Grade	Mile	\$	1,549,312				0	\$ -			0.00	\$ -			0	\$ -
6 Single Track Section - On structure	Mile	\$	2,350,080				0	\$ -			0	\$ -			0	\$ -
7 Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080				0	\$ -			0	\$ -			0	\$ -
8 Single Track Section - In Trench	Mile	\$	2,350,080				0	\$ -			1.29	\$ 3,026,618			0	\$ -
9 Freight Double Track - At Grade	Mile	\$	2,839,552				0	\$ -			0	\$ -			0	\$ -
10 Freight Single Track - At Grade	Mile	\$	1,549,312				0	\$ -			0	\$ -			0	\$ -
Earthwork Items																
1 Site Preparation - Undeveloped	Acre	\$	9,216				27.32	\$ 251,769			10.15	\$ 93,514			17.17	\$ 158,255
2 Total Cut	CY	\$	6.00				0.00	\$ -			0.00	\$ -			0.00	\$ -
3 Total Fill	CY	\$	6.00				0.00	\$ -			0.00	\$ -			0.00	\$ -
4 Borrow	CY	\$	13.00				0.00	\$ -			0.00	\$ -			0.00	\$ -
5 Spoil	CY	\$	13.00				0.00	\$ -			0.00	\$ -			0.00	\$ -
6 Landscape erosion Control	Acre	\$	6,144				0.00	\$ -			0.00	\$ -			0.00	\$ -
7 Security Fencing (Both sides of ROW)	Mile	\$	144,384				0.00	\$ -			0.00	\$ -			0.00	\$ -
8 Special Drainage Facilities	5% Earthwork							\$ 12,588				\$ 4,676				\$ 7,913
Structures, Tunnels, Walls																
1 Standard Structure	Mile	\$	34,972,672				0.00	\$ -			0.00	\$ -			0.00	\$ -
2 High Structure	Mile	\$	40,424,448					\$ -				\$ -				\$ -
3 Long Span Structure	Mile	\$	61,919,232					\$ -				\$ -				\$ -
4 Waterway Crossing - Primary	Mile	\$	85,342,208					\$ -				\$ -				\$ -
5 Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408					\$ -				\$ -				\$ -
6 Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264					\$ -				\$ -				\$ -
7 Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312					\$ -				\$ -				\$ -
8 Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896					\$ -				\$ -				\$ -
9 Double Track Drill & Blast	Mile	\$	146,887,680				0.00	\$ -			0.00	\$ -			1.29	\$ 189,173,527
10 Double Track Mined (Soft Soil)	Mile	\$	79,200,000					\$ -				\$ -				\$ -
Double Track TBM (<6 Miles)	Mile	\$	106,637,312													
Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896													
11 Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952					\$ -				\$ -				\$ -
12 Crossovers	ea	\$	442,368					\$ -				\$ -				\$ -
13 Cut & Cover Double Track Tunnel	Mile	\$	131,246,080				0.00	\$ -			0.00	\$ -			0.00	\$ -
14 Trench Short (assume cost for 1 track is 60% of unit cost)	Mile	\$	78,843,904				1.29	\$ 101,541,392			0.00	\$ -			0.00	\$ -
15 Trench Long	Mile	\$	57,524,224					\$ -				\$ -				\$ -
16 Mechanical & Electrical for Tunnels	Mile	\$	11,848,704					\$ -			1.29	\$ 15,259,695			1.29	\$ 15,259,695
17 Retaining Walls	Mile	\$	8,613,888				1.29	\$ 11,093,644			0.00	\$ -			0.00	\$ -
18 Containment Walls	Mile	\$	5,907,456				1.29	\$ 7,608,087			0.00	\$ -			0.00	\$ -
19 Single Track Cut and Cover Subway	Mile	\$	131,246,080					\$ -			1.29	\$ 169,029,042				\$ -
Four Track Drill & Blast	Mile	\$	293,775,360					\$ -				\$ -				\$ -
Four Track Mined (Soft Soil)	Mile	\$	158,400,000					\$ -				\$ -				\$ -
Four Track TBM (<6 Miles)	Mile	\$	213,274,624													
Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792													
Four Track Cut & Cover Tunnel	Mile	\$	262,492,160				0.00	\$ -			0.00	\$ -			0.00	\$ -
Grade Separations																
1 Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352					\$ -				\$ -				\$ -
Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528					\$ -				\$ -				\$ -
2 Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680					\$ -				\$ -				\$ -

COST ELEMENTS			UNIT	UNIT PRICE	Open Trench (2 Tracks)				Covered Trench (1 Track) (HST only)				Covered Trench (2 Tracks) (HST only)						
Subsection 2				Base: 2009 (3rd Quarter)	C2				C2				C2						
					Start: 775 + 00	End: 843 + 00	1.29 Miles		Start: 775 + 00	End: 843 + 00	1.29 Miles		Start: 775 + 00	End: 843 + 00	1.29 Miles				
Subsection Details							Quant.	Cost			Quant.	Cost			Quant.	Cost			
Double Track At-Grade (Mile) (Three track where noted)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles				
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 775 + 00	End: 843 + 00	1.29 Miles				
Double Track Trench (Mile)					Start: 775 + 00	End: 843 + 00	1.29 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles				
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Four Track Elevated (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles				0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Four Track Trench (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Single Track At-Grade (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00		0.00 Miles				
Single Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles				
Single Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles				
Single Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 775 + 00	End: 843 + 00	1.29 Miles		Start: 0 + 00		0.00 Miles				
3	Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568				\$	-			\$	-			\$	-		
4	Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520				\$	-			\$	-			\$	-		
5	Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216				\$	-			\$	-			\$	-		
	Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816				\$	-			\$	-			\$	-		
6	Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328				\$	-			\$	-			\$	-		
7	Street Bridging HSR Trench	ea	\$	1,398,784		0	\$	-			0	\$	-		0	\$	-		
8	Minor Crossing Closures	ea	\$	87,040		1	\$	87,040			0	\$	-		0	\$	-		
Building Items																			
1	Intermediate Passenger Stations	Each	\$	-				\$	-			\$	-			\$	-		
2	Terminal Passenger Stations	Each	\$	-		1	\$	-			1	\$	-		1	\$	-		
	Caltrain Passenger Station - At-Grade	Each	\$	15,000,000			\$	-				\$	-			\$	-		
	Caltrain Passenger Station - On Structure	Each	\$	15,000,000			\$	-				\$	-			\$	-		
	Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000			\$	-				\$	-			\$	-		
	Caltrain Passenger Station - In Trench	Each	\$	15,000,000			\$	-				\$	-			\$	-		
3	Maintenance Facility	Each	\$	123,921,884			\$	-				\$	-			\$	-		
4	Parking - Structures	space	\$	-			\$	-				\$	-			\$	-		
5	Parking - At Grade	space	\$	-			\$	-				\$	-			\$	-		
Rail & Utility Relocation																			
1	Single Track Relocation (Temporary)	Mile	\$	2,000,896			\$	-				\$	-			\$	-		
2	Single Track Relocation (Permanent)	Mile	\$	2,000,896			\$	-				\$	-			\$	-		
3	Single Track Removal	Mile	\$	130,048			\$	-				\$	-			\$	-		
4	Major Utility Relocations - Dense Urban	Mile	\$	1,548,288			\$	-				\$	-			\$	-		
5	Major Utility Relocations - Urban	Mile	\$	1,084,416			\$	-				\$	-			\$	-		
6	Major Utility Relocations - Dense Suburban	Mile	\$	775,168			\$	-				\$	-			\$	-		
7	Major Utility Relocations - Suburban	Mile	\$	464,896			\$	-				\$	-			\$	-		
8	Major Utility Relocations - Undeveloped	Mile	\$	30,720			\$	-				\$	-			\$	-		
ROW (Not Included)																			
ROW required for each segment																			
1	Dense Urban	Acre	\$	2,786,321			\$	-				\$	-			\$	-		
2	Urban	Acre	\$	1,371,510			\$	-				\$	-			\$	-		
3	Dense Suburban	Acre	\$	908,134			\$	-				\$	-			\$	-		
4	Suburban	Acre	\$	208,418			\$	-				\$	-			\$	-		
5	Undeveloped	Acre	\$	3,642			\$	-				\$	-			\$	-		
ROW required for Temp. Construction Easement																			
1	Dense Urban	Acre					\$	-				\$	-			\$	-		
2	Urban	Acre					\$	-				\$	-			\$	-		
3	Dense Suburban	Acre					\$	-				\$	-			\$	-		
4	Suburban	Acre					\$	-				\$	-			\$	-		
5	Undeveloped	Acre					\$	-				\$	-			\$	-		
Right-of-Way Required for Stations, Maintenance & Parking Facilities																			
6	Dense Urban	Acre	\$	2,786,321			\$	-				\$	-			\$	-		
7	Urban	Acre	\$	1,371,510			\$	-				\$	-			\$	-		
8	Dense Suburban	Acre	\$	908,134			\$	-				\$	-			\$	-		
9	Suburban	Acre	\$	208,418			\$	-				\$	-			\$	-		
10	Undeveloped	Acre	\$	3,642			\$	-				\$	-			\$	-		
Environmental Mitigation = 3% Line Costs								\$	3,799,433			\$	5,622,406			\$	6,319,579		
System Elements																			
1	Signaling (ATC)	Mile	\$	2,070,000		1.29	\$	695,455			1.29	\$	695,455		1.29	\$	695,455		
2	Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000		1.29	\$	139,091			1.29	\$	139,091		1.29	\$	139,091		
3	Wayside Protection System	Mile	\$	108,000			\$	-			1.29	\$	-		1.29	\$	-		
Electrification Items																			
1	Traction Power supply	Mile	\$	1,170,000		1.29	\$	1,912,500			1.29	\$	1,912,500		1.29	\$	1,912,500		
2	Traction Power Distribution	Mile	\$	1,485,000			\$	-				\$	-			\$	-		
Program Implementation Costs (per screening)								\$	133,194,234			\$	195,782,997			\$	219,719,250		
Program Implementation Costs								\$	33,964,530			\$	49,924,664			\$	56,028,409		
Contingencies (per screening) (25%)								\$	33,298,558			\$	48,945,749			\$	54,929,812		
Subtotal								\$	200,457,322				\$	294,653,410				\$	330,677,471
Subtotal (Rounded)								\$	200,000,000				\$	295,000,000				\$	331,000,000

Note: unit price for three track is interpolated from double and four tracks

COST ELEMENTS			UNIT	UNIT PRICE	At-Grade (2 Tracks)				At-Grade (3 Tracks)				Open Trench (HST only) (1 Track)				Open Trench (HST only) (2 Tracks)			
Subsection 2			Base: 2009 (3rd Quarter)		D				D				D				D			
					Start: 843 + 00	End: 905 + 00	1.17 Miles		Start: 843 + 00	End: 905 + 00	1.17 Miles		Start: 843 + 00	End: 905 + 00	1.17 Miles		Start: 843 + 00	End: 905 + 00	1.17 Miles	
Subsection Details							Quant.	Cost				Quant.	Cost				Quant.	Cost		
Double Track At-Grade (Mile)					Start: 843 + 00	End: 905 + 00	1.17 Miles		Start: 843 + 00	End: 905 + 00	1.17 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 843 + 00	End: 905 + 00	1.17 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Single Track At-Grade (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Single Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Single Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Single Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 843 + 00	End: 905 + 00	1.17 Miles		Start: 0 + 00		0.00 Miles	
Double Track Section - Total																				
1 Double Track Section - At Grade	Mile	\$	2,100,224				1.17	\$ 2,466,172				0.00	\$ -						0.00	\$ -
2 Double Track Section - On Structure	Mile	\$	4,700,160				0.00	\$ -				0.00	\$ -						0.00	\$ -
3 Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160				0.00	\$ -				0.00	\$ -						0.00	\$ -
4 Double Track Section - In Trench	Mile	\$	4,700,160				0.00	\$ -				0.00	\$ -						1.2	\$ 5,519,127
Three Track Section - Total (See note)																				
Three-track Section - At Grade	Mile	\$	3,150,336				0.00	\$ -				1.17	\$ 3,699,258						0.00	\$ -
Three-Track Section - On Structure	Mile	\$	7,050,240				0.00	\$ -				0.00	\$ -						0.00	\$ -
Three-Track Section - In Tunnel or Subway	Mile	\$	7,050,240				0.00	\$ -				0.00	\$ -						0.00	\$ -
Three-Track Section - In Trench	Mile	\$	7,050,240				0.00	\$ -				0.00	\$ -						0.00	\$ -
Four Track Section - Total																				
Four-track Section - At Grade	Mile	\$	4,200,448				0.00	\$ -				0.00	\$ -						0.00	\$ -
Four-Track Section - On Structure	Mile	\$	9,400,320				0	\$ -				0	\$ -						0	\$ -
Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320				0	\$ -				0	\$ -						0	\$ -
Four-Track Section - In Trench	Mile	\$	9,400,320				0	\$ -				0	\$ -						0.00	\$ -
Single Track - Total																				
5 Single Track Section - At Grade	Mile	\$	1,549,312				0	\$ -				0	\$ -						0	\$ -
6 Single Track Section - On structure	Mile	\$	2,350,080				0	\$ -				0	\$ -						0	\$ -
7 Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080				0	\$ -				0	\$ -						0	\$ -
8 Single Track Section - In Trench	Mile	\$	2,350,080				0	\$ -				0	\$ -						0	\$ -
9 Freight Double Track - At Grade	Mile	\$	2,839,552				0	\$ -				0	\$ -						0	\$ -
10 Freight Single Track - At Grade	Mile	\$	1,549,312				0	\$ -				0	\$ -						0	\$ -
Earthwork Items																				
1 Site Preparation - Undeveloped	Acre	\$	9,216				9.25	\$ 85,263				15.66	\$ 144,291						9.25	\$ 85,263
2 Total Cut	CY	\$	6.00				0.00	\$ -				0.00	\$ -						0.00	\$ -
3 Total Fill	CY	\$	6.00				0.00	\$ -				0.00	\$ -						0.00	\$ -
4 Borrow	CY	\$	13.00				0.00	\$ -				0.00	\$ -						0.00	\$ -
5 Spoil	CY	\$	13.00				0.00	\$ -				0.00	\$ -						0.00	\$ -
6 Landscape erosion Control	Acre	\$	6,144				0.00	\$ -				0.00	\$ -						0.00	\$ -
7 Security Fencing (Both sides of ROW)	Mile	\$	144,384				0.00	\$ -				0.00	\$ -						0.00	\$ -
8 Special Drainage Facilities	5% Earthwork						\$	4,263				\$	7,215						\$	4,263
Structures, Tunnels, Walls																				
1 Standard Structure	Mile	\$	34,972,672				0.00	\$ -				0.00	\$ -						0.00	\$ -
2 High Structure	Mile	\$	40,424,448					\$ -					\$ -							\$ -
3 Long Span Structure	Mile	\$	61,919,232					\$ -					\$ -							\$ -
4 Waterway Crossing - Primary	Mile	\$	85,342,208					\$ -					\$ -							\$ -
5 Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408					\$ -					\$ -							\$ -
6 Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264					\$ -					\$ -							\$ -
7 Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312					\$ -					\$ -							\$ -
8 Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896					\$ -					\$ -							\$ -
9 Double Track Drill & Blast	Mile	\$	146,887,680				0.00	\$ -				0.00	\$ -						0.00	\$ -
10 Double Track Mined (Soft Soil)	Mile	\$	79,200,000					\$ -					\$ -							\$ -
Double Track TBM (<6 Miles)	Mile	\$	106,637,312																	
Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896																	
11 Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952					\$ -					\$ -							\$ -
12 Crossovers	ea	\$	442,368					\$ -					\$ -							\$ -
13 Cut & Cover Double Track Tunnel	Mile	\$	131,246,080				0.00	\$ -				0.00	\$ -						0.00	\$ -
14 Trench Short	Mile	\$	78,843,904				0.00	\$ -				0.00	\$ -						1.17	\$ 92,581,857
15 Trench Long	Mile	\$	57,524,224					\$ -					\$ -							\$ -
16 Mechanical & Electrical for Tunnels	Mile	\$	11,848,704					\$ -					\$ -							\$ -
17 Retaining Walls	Mile	\$	8,613,888				0.00	\$ -				0.00	\$ -						0.00	\$ -
18 Containment Walls	Mile	\$	5,907,456				0.00	\$ -				0.00	\$ -						0.00	\$ -
19 Single Track Cut and Cover Subway	Mile	\$	131,246,080					\$ -					\$ -							\$ -
Four Track Drill & Blast	Mile	\$	293,775,360					\$ -					\$ -							\$ -
Four Track Mined (Soft Soil)	Mile	\$	158,400,000					\$ -					\$ -							\$ -
Four Track TBM (<6 Miles)	Mile	\$	213,274,624					\$ -					\$ -							\$ -
Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792					\$ -					\$ -							\$ -
Four Track Cut & Cover Tunnel	Mile	\$	262,492,160				0.00	\$ -				0.00	\$ -						0.00	\$ -
Grade Separations																				
1 Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352					\$ -					\$ -							\$ -
Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528					\$ -					\$ -							\$ -
2 Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680					\$ -					\$ -							\$ -

COST ELEMENTS			UNIT	UNIT PRICE	At-Grade (2 Tracks)				At-Grade (3 Tracks)				Open Trench (HST only) (1 Track)				Open Trench (HST only) (2 Tracks)			
Subsection 2			Base: 2009 (3rd Quarter)		D				D				D				D			
					Start: 843 + 00	End: 905 + 00	1.17 Miles		Start: 843 + 00	End: 905 + 00	1.17 Miles		Start: 843 + 00	End: 905 + 00	1.17 Miles		Start: 843 + 00	End: 905 + 00	1.17 Miles	
Subsection Details							Quant.	Cost				Quant.	Cost				Quant.	Cost		
Double Track At-Grade (Mile)					Start: 843 + 00	End: 905 + 00	1.17 Miles		Start: 843 + 00	End: 905 + 00	1.17 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 843 + 00	End: 905 + 00	1.17 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Single Track At-Grade (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Single Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Single Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Single Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 843 + 00	End: 905 + 00	1.17 Miles		Start: 0 + 00		0.00 Miles	
3	Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568				\$ -				\$ -				\$ -				\$ -
4	Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520			0	\$ -			0	\$ -				\$ -				\$ -
5	Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216				\$ -				\$ -				\$ -				\$ -
	Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816				\$ -				\$ -				\$ -				\$ -
6	Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328				\$ -				\$ -				\$ -				\$ -
7	Street Bridging HSR Trench	ea	\$	1,398,784				\$ -				\$ -			0	\$ -			0	\$ -
8	Minor Crossing Closures	ea	\$	87,040			1	\$ 87,040			1	\$ 87,040			1	\$ 87,040			1	\$ 87,040
Building Items																				
1	Intermediate Passenger Stations	Each	\$	-				\$ -				\$ -				\$ -				\$ -
1	Intermediate Passenger Stations (Millbrae)	Each	\$	12,562,617			0	\$ -			0.5	\$ 6,281,309			0.5	\$ 6,281,309			1	\$ 12,562,617
2	Terminal Passenger Stations	Each	\$	-				\$ -				\$ -				\$ -				\$ -
	Caltrain Passenger Station - At-Grade	Each	\$	15,000,000			0	\$ -			0.5	\$ 7,500,000				\$ -				\$ -
	Caltrain Passenger Station - On Structure	Each	\$	15,000,000				\$ -				\$ -				\$ -				\$ -
	Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000				\$ -				\$ -				\$ -				\$ -
	Caltrain Passenger Station - In Trench	Each	\$	15,000,000				\$ -				\$ -				\$ -				\$ -
3	Maintenance Facility	Each	\$	123,921,884				\$ -				\$ -				\$ -				\$ -
4	Parking - Structures	space	\$	-				\$ -				\$ -				\$ -				\$ -
5	Parking - At Grade	space	\$	-				\$ -				\$ -				\$ -				\$ -
Rail & Utility Relocation																				
1	Single Track Relocation (Temporary)	Mile	\$	2,000,896				\$ -				\$ -				\$ -				\$ -
2	Single Track Relocation (Permanent)	Mile	\$	2,000,896				\$ -				\$ -				\$ -				\$ -
3	Single Track Removal	Mile	\$	130,048				\$ -				\$ -				\$ -				\$ -
4	Major Utility Relocations - Dense Urban	Mile	\$	1,548,288				\$ -				\$ -				\$ -				\$ -
5	Major Utility Relocations - Urban	Mile	\$	1,084,416				\$ -				\$ -				\$ -				\$ -
6	Major Utility Relocations - Dense Suburban	Mile	\$	775,168				\$ -				\$ -				\$ -				\$ -
7	Major Utility Relocations - Suburban	Mile	\$	464,896				\$ -				\$ -				\$ -				\$ -
8	Major Utility Relocations - Undeveloped	Mile	\$	30,720				\$ -				\$ -				\$ -				\$ -
ROW (Not Included)																				
ROW required for each segment																				
1	Dense Urban	Acre	\$	2,786,321				\$ -				\$ -				\$ -				\$ -
2	Urban	Acre	\$	1,371,510				\$ -				\$ -				\$ -				\$ -
3	Dense Suburban	Acre	\$	908,134				\$ -				\$ -				\$ -				\$ -
4	Suburban	Acre	\$	208,418				\$ -				\$ -				\$ -				\$ -
5	Undeveloped	Acre	\$	3,642				\$ -				\$ -				\$ -				\$ -
ROW required for Temp. Construction Easement																				
1	Dense Urban	Acre						\$ -				\$ -				\$ -				\$ -
2	Urban	Acre						\$ -				\$ -				\$ -				\$ -
3	Dense Suburban	Acre						\$ -				\$ -				\$ -				\$ -
4	Suburban	Acre						\$ -				\$ -				\$ -				\$ -
5	Undeveloped	Acre						\$ -				\$ -				\$ -				\$ -
Right-of-Way Required for Stations, Maintenance & Parking Facilities																				
6	Dense Urban	Acre	\$	2,786,321				\$ -				\$ -				\$ -				\$ -
7	Urban	Acre	\$	1,371,510				\$ -				\$ -				\$ -				\$ -
8	Dense Suburban	Acre	\$	908,134				\$ -				\$ -				\$ -				\$ -
9	Suburban	Acre	\$	208,418				\$ -				\$ -				\$ -				\$ -
10	Undeveloped	Acre	\$	3,642				\$ -				\$ -				\$ -				\$ -
	Environmental Mitigation = 3% Line Costs							\$ 79,282				\$ 531,573				\$ 787,451				\$ 3,325,205
System Elements																				
1	Signaling (ATC)	Mile	\$	2,070,000			1.17	\$ 2,430,682			1.17	\$ 2,430,682			1.17	\$ 2,430,682			1.17	\$ 2,430,682
2	Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			1.17	\$ 634,091			1.17	\$ 634,091			1.17	\$ 634,091			1.17	\$ 634,091
3	Wayside Protection System	Mile	\$	108,000			1.17	\$ 126,818			1.17	\$ 126,818			1.17	\$ 126,818			1.17	\$ 126,818
Electrification Items																				
1	Traction Power supply	Mile	\$	1,170,000			1.17	\$ 1,373,864			1.17	\$ 1,373,864			1.17	\$ 1,373,864			1.17	\$ 1,373,864
2	Traction Power Distribution	Mile	\$	1,485,000			1.17	\$ 1,743,750			1.17	\$ 1,743,750			1.17	\$ 1,743,750			1.17	\$ 1,743,750
Program Implementation Costs (per screening)								\$ 9,031,225				\$ 24,559,890				\$ 33,345,012				\$ 120,474,577
Program Implementation Costs								\$ 2,302,962				\$ 6,262,772				\$ 8,502,978				\$ 30,721,017
Contingencies (per screening) (25%)								\$ 2,257,806				\$ 6,139,973				\$ 8,336,253				\$ 30,118,644
Subtotal								\$ 13,591,993				\$ 36,962,635				\$ 50,184,243				\$ 181,314,238
Subtotal (Rounded)								\$ 14,000,000				\$ 37,000,000				\$ 50,000,000				\$ 181,000,000

COST ELEMENTS			UNIT	UNIT PRICE	Covered Trench (HST only) (1 Track)				Covered Trench (HST only) (2 Tracks)			
Subsection 2			Base: 2009 (3rd Quarter)		D				D			
					Start: 843 + 00	End: 905 + 00	1.17 Miles		Start: 843 + 00	End: 905 + 00	1.17 Miles	
Subsection Details							Quant.	Cost			Quant.	Cost
Double Track At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 843 + 00	End: 905 + 00	1.17 Miles	
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Tunnel (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Trench (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Single Track At-Grade (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Single Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Single Track Tunnel (Mile)					Start: 843 + 00	End: 905 + 00	1.17 Miles		Start: 0 + 00		0.00 Miles	
Single Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Section - Total												
1 Double Track Section - At Grade	Mile	\$	2,100,224				0.00	\$ -			0.00	\$ -
2 Double Track Section - On Structure	Mile	\$	4,700,160				0.00	\$ -			0.00	\$ -
3 Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160				0.00	\$ -			1.17	\$ 5,519,127
4 Double Track Section - In Trench	Mile	\$	4,700,160				0.00	\$ -			0.00	\$ -
Three Track Section - Total (See note)												
Three-track Section - At Grade	Mile	\$	3,150,336				0.00	\$ -			0.00	\$ -
Three-Track Section - On Structure	Mile	\$	7,050,240				0.00	\$ -			0.00	\$ -
Three-Track Section - In Tunnel or Subway	Mile	\$	7,050,240				0.00	\$ -			0.00	\$ -
Three-Track Section - In Trench	Mile	\$	7,050,240				0.00	\$ -			0.00	\$ -
Four Track Section - Total												
Four-track Section - At Grade	Mile	\$	4,200,448				0.00	\$ -			0.00	\$ -
Four-Track Section - On Structure	Mile	\$	9,400,320				0	\$ -			0	\$ -
Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320				0.00	\$ -			0.00	\$ -
Four-Track Section - In Trench	Mile	\$	9,400,320				0	\$ -			0	\$ -
Single Track - Total												
5 Single Track Section - At Grade	Mile	\$	1,549,312				0	\$ -			0	\$ -
6 Single Track Section - On structure	Mile	\$	2,350,080				0	\$ -			0	\$ -
7 Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080				1.17	\$ 2,759,564			0	\$ -
8 Single Track Section - In Trench	Mile	\$	2,350,080				0	\$ -			0	\$ -
9 Freight Double Track - At Grade	Mile	\$	2,839,552				0	\$ -			0	\$ -
10 Freight Single Track - At Grade	Mile	\$	1,549,312				0	\$ -			0	\$ -
Earthwork Items												
1 Site Preparation - Undeveloped	Acre	\$	9,216				9.25	\$ 85,263			15.66	\$ 144,291
2 Total Cut	CY		6.00				298518.52	\$ 1,791,111			505185.19	\$ 3,031,111
3 Total Fill	CY	\$	6.00				0.00	\$ -			0.00	\$ -
4 Borrow	CY	\$	13.00				0.00	\$ -			0.00	\$ -
5 Spoil	CY	\$	13.00				298518.52	\$ 3,880,741			505185.19	\$ 6,567,407
6 Landscape erosion Control	Acre	\$	6,144				0.00	\$ -			0.00	\$ -
7 Security Fencing (Both sides of ROW)	Mile	\$	144,384				0.00	\$ -			0.00	\$ -
8 Special Drainage Facilities	5% Earthwork							\$ 287,856				\$ 487,140
Structures, Tunnels, Walls												
1 Standard Structure	Mile	\$	34,972,672				0.00	\$ -			0.00	\$ -
2 High Structure	Mile	\$	40,424,448					\$ -				\$ -
3 Long Span Structure	Mile	\$	61,919,232					\$ -				\$ -
4 Waterway Crossing - Primary	Mile	\$	85,342,208					\$ -				\$ -
5 Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408					\$ -				\$ -
6 Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264					\$ -				\$ -
7 Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312					\$ -				\$ -
8 Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896					\$ -				\$ -
9 Double Track Drill & Blast	Mile	\$	146,887,680				0.00	\$ -			1.17	\$ 172,481,745
10 Double Track Mined (Soft Soil)	Mile	\$	79,200,000					\$ -				\$ -
Double Track TBM (<6 Miles)	Mile	\$	106,637,312									
Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896									
11 Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952					\$ -				\$ -
12 Crossovers	ea	\$	442,368					\$ -				\$ -
13 Cut & Cover Double Track Tunnel	Mile	\$	131,246,080				0.00	\$ -			0.00	\$ -
14 Trench Short	Mile	\$	78,843,904				0.00	\$ -			0.00	\$ -
15 Trench Long	Mile	\$	57,524,224					\$ -				\$ -
16 Mechanical & Electrical for Tunnels	Mile	\$	11,848,704				1.17	\$ 13,913,251			1.17	\$ 13,913,251
17 Retaining Walls	Mile	\$	8,613,888				0.00	\$ -			0.00	\$ -
18 Containment Walls	Mile	\$	5,907,456				0.00	\$ -			0.00	\$ -
19 Single Track Cut and Cover Subway	Mile	\$	131,246,080				1.17	\$ 154,114,715				\$ -
Four Track Drill & Blast	Mile	\$	293,775,360					\$ -				\$ -
Four Track Mined (Soft Soil)	Mile	\$	158,400,000					\$ -				\$ -
Four Track TBM (<6 Miles)	Mile	\$	213,274,624									
Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792									
Four Track Cut & Cover Tunnel	Mile	\$	262,492,160				0.00	\$ -			0.00	\$ -
Grade Separations												
1 Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352					\$ -				\$ -
Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528					\$ -				\$ -
2 Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680					\$ -				\$ -

COST ELEMENTS			UNIT	UNIT PRICE	Covered Trench (HST only) (1 Track)				Covered Trench (HST only) (2 Tracks)					
Subsection 2			Base: 2009 (3rd Quarter)		D				D					
					Start: 843 + 00	End: 905 + 00	1.17 Miles		Start: 843 + 00	End: 905 + 00	1.17 Miles			
Subsection Details							Quant.	Cost			Quant.	Cost		
Double Track At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 843 + 00	End: 905 + 00	1.17 Miles			
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Tunnel (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Trench (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Single Track At-Grade (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Single Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Single Track Tunnel (Mile)					Start: 843 + 00	End: 905 + 00	1.17 Miles		Start: 0 + 00		0.00 Miles			
Single Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
3	Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568				\$	-			\$	-	
4	Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520				\$	-			\$	-	
5	Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216				\$	-			\$	-	
	Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816				\$	-			\$	-	
6	Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328				\$	-			\$	-	
7	Street Bridging HSR Trench	ea	\$	1,398,784			0	\$	-		0	\$	-	
8	Minor Crossing Closures	ea	\$	87,040			0	\$	-		0	\$	-	
Building Items														
1	Intermediate Passenger Stations	Each	\$	-				\$	-			\$	-	
1	Intermediate Passenger Stations (Millbrae)	Each	\$	12,562,617			0.5	\$	6,281,309		1	\$	12,562,617	
2	Terminal Passenger Stations	Each	\$	-				\$	-			\$	-	
	Caltrain Passenger Station - At-Grade	Each	\$	15,000,000				\$	-			\$	-	
	Caltrain Passenger Station - On Structure	Each	\$	15,000,000				\$	-			\$	-	
	Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000				\$	-			\$	-	
	Caltrain Passenger Station - In Trench	Each	\$	15,000,000				\$	-			\$	-	
3	Maintenance Facility	Each	\$	123,921,884				\$	-			\$	-	
4	Parking - Structures	space	\$	-				\$	-			\$	-	
5	Parking - At Grade	space	\$	-				\$	-			\$	-	
Rail & Utility Relocation														
1	Single Track Relocation (Temporary)	Mile	\$	2,000,896				\$	-			\$	-	
2	Single Track Relocation (Permanent)	Mile	\$	2,000,896				\$	-			\$	-	
3	Single Track Removal	Mile	\$	130,048				\$	-			\$	-	
4	Major Utility Relocations - Dense Urban	Mile	\$	1,548,288				\$	-			\$	-	
5	Major Utility Relocations - Urban	Mile	\$	1,084,416				\$	-			\$	-	
6	Major Utility Relocations - Dense Suburban	Mile	\$	775,168				\$	-			\$	-	
7	Major Utility Relocations - Suburban	Mile	\$	464,896				\$	-			\$	-	
8	Major Utility Relocations - Undeveloped	Mile	\$	30,720				\$	-			\$	-	
ROW (Not Included)														
ROW required for each segment														
1	Dense Urban	Acre	\$	2,786,321				\$	-			\$	-	
2	Urban	Acre	\$	1,371,510				\$	-			\$	-	
3	Dense Suburban	Acre	\$	908,134				\$	-			\$	-	
4	Suburban	Acre	\$	208,418				\$	-			\$	-	
5	Undeveloped	Acre	\$	3,642				\$	-			\$	-	
ROW required for Temp. Construction Easement														
1	Dense Urban	Acre						\$	-			\$	-	
2	Urban	Acre						\$	-			\$	-	
3	Dense Suburban	Acre						\$	-			\$	-	
4	Suburban	Acre						\$	-			\$	-	
5	Undeveloped	Acre						\$	-			\$	-	
Right-of-Way Required for Stations, Maintenance & Parking Facilities														
6	Dense Urban	Acre	\$	2,786,321				\$	-			\$	-	
7	Urban	Acre	\$	1,371,510				\$	-			\$	-	
8	Dense Suburban	Acre	\$	908,134				\$	-			\$	-	
9	Suburban	Acre	\$	208,418				\$	-			\$	-	
10	Undeveloped	Acre	\$	3,642				\$	-			\$	-	
	Environmental Mitigation = 3% Line Costs							\$	5,493,414			\$	6,441,201	
System Elements														
1	Signaling (ATC)	Mile	\$	2,070,000			1.17	\$	2,430,682		1.17	\$	2,430,682	
2	Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			1.17	\$	634,091		1.17	\$	634,091	
3	Wayside Protection System	Mile	\$	108,000			1.17	\$	126,818		1.17	\$	126,818	
Electrification Items														
1	Traction Power supply	Mile	\$	1,170,000			1.17	\$	1,373,864		1.17	\$	1,373,864	
2	Traction Power Distribution	Mile	\$	1,485,000			1.17	\$	1,743,750		1.17	\$	1,743,750	
								\$	194,916,427			\$	227,457,096	
Program Implementation Costs (per screening)								\$	49,703,689			\$	58,001,559	
Program Implementation Costs														
Contingencies (per screening) (25%)								\$	48,729,107			\$	56,864,274	
Subtotal								\$	293,349,223	\$				342,322,929
Subtotal (Rounded)								\$	293,000,000	\$				342,000,000

Subsection 3	3A (0.8 miles)			3B (1.9 miles)			3C & 3D (1.8 miles)			3E (0.5 miles)
	At Grade	Open Trench	Covered Trench/ Tunnel	Aerial Viaduct	Open Trench	Covered Trench/ Tunnel	Aerial Viaduct	Open Trench	Covered Trench/ Tunnel	At Grade
Capital Cost (\$2009 in Millions) does not include ROW	\$11	\$132	\$345	\$194	\$433	\$937	\$265	\$425	\$894	\$30
Acquisition Cost of Permanent ROW	Highest	Medium	Lowest	Medium	Medium	Lowest	Medium	Medium	Lowest	Highest
Notes:				1. Caltrain Broadway and Burlingame Stations	1. Caltrain Broadway and Burlingame Stations	1. Caltrain Broadway and Burlingame Stations	1. Caltrain San Mateo Station; 2. 1st, 2nd, 3rd, 4th, 5th, and 9th Aves to be partially lowered.	1. Caltrain San Mateo Station	1. Caltrain San Mateo Station	1. Caltrain Hayward Park Station

COST ELEMENTS			UNIT	UNIT PRICE	At-Grade			Open Trench				Covered Trench				
Subsection 3				Base: 2009 (3rd Quarter)	A			A				A				
					Start: 905 + 00	End: 945 + 00	0.76 Miles	Start: 905 + 00	End: 945 + 00	0.76 Miles	Start: 905 + 00	End: 945 + 00	0.76 Miles			
Subsection Details						Quant.	Cost			Quant.	Cost			Quant.	Cost	
Double Track At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 905 + 00	End: 945 + 00	0.76 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 905 + 00	End: 945 + 00	0.76 Miles	
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 905 + 00	End: 945 + 00	0.76 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Section - Total																
1	Double Track Section - At Grade	Mile	\$	2,100,224			0.00 \$	-			0.00 \$	-			0.00 \$	-
2	Double Track Section - On Structure	Mile	\$	4,700,160			0.00 \$	-			0.00 \$	-			0.00 \$	-
3	Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160			0.00 \$	-			0.00 \$	-			0.00 \$	-
4	Double Track Section - In Trench	Mile	\$	4,700,160			0.00 \$	-			0.00 \$	-			0.00 \$	-
Four Track Section - Total																
	Four-track Section - At Grade	Mile	\$	4,200,448			0.76 \$	3,182,158			0.00 \$	-			0.00 \$	-
	Four-Track Section - On Structure	Mile	\$	9,400,320			0 \$	-			0.00 \$	-			0.00 \$	-
	Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320			0 \$	-			0.00 \$	-			0.76 \$	7,121,455
	Four-Track Section - In Trench	Mile	\$	9,400,320			0 \$	-			0.76 \$	7,121,455			0.00 \$	-
Single Track - Total																
5	Single Track Section - At Grade	Mile	\$	1,549,312			0 \$	-			0 \$	-			0 \$	-
6	Single Track Section - On structure	Mile	\$	2,350,080			0 \$	-			0 \$	-			0 \$	-
7	Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080			0 \$	-			0 \$	-			0 \$	-
8	Single Track Section - In Trench	Mile	\$	2,350,080			0 \$	-			0 \$	-			0 \$	-
9	Freight Double Track - At Grade	Mile	\$	2,839,552			0 \$	-			0 \$	-			0 \$	-
10	Freight Single Track - At Grade	Mile	\$	1,549,312			0 \$	-			0 \$	-			0 \$	-
Earthwork Items																
1	Site Preparation - Undeveloped	Acre	\$	9,216			0.00 \$	-			10.10 \$	93,091			10.10 \$	93,091
2	Total Cut	CY	\$	6.00			0.00 \$	-			162962.96 \$	977,778			162962.96 \$	977,778
3	Total Fill	CY	\$	6.00			0.00 \$	-			0.00 \$	-			0.00 \$	-
4	Borrow	CY	\$	13.00			0.00 \$	-			0.00 \$	-			0.00 \$	-
5	Spoil	CY	\$	13.00			0.00 \$	-			162962.96 \$	2,118,519			162962.96 \$	2,118,519
6	Landscape erosion Control	Acre	\$	6,144			0.00 \$	-			10.10 \$	62,061			0.00 \$	-
7	Security Fencing (Both sides of ROW)	Mile	\$	144,384			0.76 \$	109,382			0.76 \$	109,382			0.00 \$	-
8	Special Drainage Facilities	5% Earthwork					\$	5,469			\$	168,041			\$	159,469
Structures, Tunnels, Walls																
1	Standard Structure	Mile	\$	34,972,672			0 \$	-			0 \$	-			0 \$	-
2	High Structure	Mile	\$	40,424,448			\$	-			\$	-			\$	-
3	Long Span Structure	Mile	\$	61,919,232			\$	-			\$	-			\$	-
4	Waterway Crossing - Primary	Mile	\$	85,342,208			\$	-			\$	-			\$	-
5	Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408			\$	-			\$	-			\$	-
6	Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264			\$	-			\$	-			\$	-
7	Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312			\$	-			\$	-			\$	-
8	Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896			\$	-			\$	-			\$	-
9	Double Track Drill & Blast	Mile	\$	146,887,680			0 \$	-			0 \$	-			0 \$	-
10	Double Track Mined (Soft Soil)	Mile	\$	79,200,000			\$	-			\$	-			\$	-
	Double Track TBM (<6 Miles)	Mile	\$	106,637,312			\$	-			\$	-			\$	-
	Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896			\$	-			\$	-			\$	-
11	Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952			\$	-			\$	-			\$	-
12	Crossovers	ea	\$	442,368			\$	-			\$	-			\$	-
13	Cut & Cover Double Track Tunnel	Mile	\$	131,246,080			0 \$	-			0 \$	-			0 \$	-
14	Trench Short	Mile	\$	78,843,904			0 \$	-			0.76 \$	59,730,230			0 \$	-
15	Trench Long	Mile	\$	57,524,224			\$	-			\$	-			\$	-
16	Mechanical & Electrical for Tunnels	Mile	\$	11,848,704			0 \$	-			0 \$	-			0.76 \$	8,976,291
17	Retaining Walls	Mile	\$	8,613,888			0 \$	-			0.76 \$	6,525,673			0 \$	-
18	Containment Walls	Mile	\$	5,907,456			0 \$	-			0.76 \$	4,475,345			0 \$	-
19	Single Track Cut and Cover Subway	Mile	\$	131,246,080			\$	-			\$	-			\$	-
	Four Track Drill & Blast	Mile	\$	293,775,360			\$	-			\$	-			\$	-
	Four Track Mined (Soft Soil)	Mile	\$	158,400,000			\$	-			\$	-			\$	-
	Four Track TBM (<6 Miles)	Mile	\$	213,274,624			\$	-			\$	-			\$	-
	Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792			\$	-			\$	-			\$	-
	Four Track Cut & Cover Tunnel	Mile	\$	262,492,160			0.00 \$	-			0.00 \$	-			0.76 \$	198,857,697
Grade Separations																
1	Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352			\$	-			\$	-			\$	-
	Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528			\$	-			\$	-			\$	-
2	Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680			\$	-			\$	-			\$	-
3	Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568			\$	-			\$	-			\$	-
4	Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520			\$	-			\$	-			\$	-
5	Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216			\$	-			\$	-			\$	-
	Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816			\$	-			\$	-			\$	-
6	Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328			\$	-			\$	-			\$	-
7	Street Bridging HSR Trench	ea	\$	1,398,784			\$	-			\$	-			\$	-
8	Minor Crossing Closures	ea	\$	87,040			1 \$	87,040			\$	-			\$	-
Building Items																

COST ELEMENTS			UNIT	UNIT PRICE	At-Grade		Open Trench				Covered Trench					
Subsection 3				Base: 2009 (3rd Quarter)	A		A				A					
					Start: 905 + 00	End: 945 + 00	0.76 Miles		Start: 905 + 00	End: 945 + 00	0.76 Miles		Start: 905 + 00	End: 945 + 00	0.76 Miles	
Subsection Details							Quant.	Cost			Quant.	Cost			Quant.	Cost
Double Track At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 905 + 00	End: 945 + 00	0.76 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 905 + 00	End: 945 + 00	0.76 Miles	
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 905 + 00	End: 945 + 00	0.76 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
1 Intermediate Passenger Stations	Each	\$	-				\$	-			\$	-			\$	-
2 Terminal Passenger Stations	Each	\$	-				\$	-			\$	-			\$	-
Caltrain Passenger Station - At-Grade	Each	\$	15,000,000				\$	-			\$	-			\$	-
Caltrain Passenger Station - On Structure	Each	\$	15,000,000				\$	-			\$	-			\$	-
Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000				\$	-			\$	-			\$	-
Caltrain Passenger Station - In Trench	Each	\$	15,000,000				\$	-			\$	-			\$	-
3 Maintenance Facility	Each	\$	123,921,884				\$	-			\$	-			\$	-
4 Parking - Structures	space	\$	-				\$	-			\$	-			\$	-
5 Parking - At Grade	space	\$	-				\$	-			\$	-			\$	-
Rail & Utility Relocation																
1 Single Track Relocation (Temporary)	Mile	\$	2,000,896				\$	-			\$	-			\$	-
2 Single Track Relocation (Permanent)	Mile	\$	2,000,896				\$	-			\$	-			\$	-
3 Single Track Removal	Mile	\$	130,048				\$	-			\$	-			\$	-
4 Major Utility Relocations - Dense Urban	Mile	\$	1,548,288				\$	-			\$	-			\$	-
5 Major Utility Relocations - Urban	Mile	\$	1,084,416				\$	-			\$	-			\$	-
6 Major Utility Relocations - Dense Suburban	Mile	\$	775,168				\$	-			\$	-			\$	-
7 Major Utility Relocations - Suburban	Mile	\$	464,896				\$	-			\$	-			\$	-
8 Major Utility Relocations - Undeveloped	Mile	\$	30,720				\$	-			\$	-			\$	-
ROW (Not Included)																
ROW required for each segment																
1 Dense Urban	Acre	\$	2,786,321				\$	-			\$	-			\$	-
2 Urban	Acre	\$	1,371,510				\$	-			\$	-			\$	-
3 Dense Suburban	Acre	\$	908,134				\$	-			\$	-			\$	-
4 Suburban	Acre	\$	208,418				\$	-			\$	-			\$	-
5 Undeveloped	Acre	\$	3,642				\$	-			\$	-			\$	-
ROW required for Temp. Construction Easement																
1 Dense Urban	Acre						\$	-			\$	-			\$	-
2 Urban	Acre						\$	-			\$	-			\$	-
3 Dense Suburban	Acre						\$	-			\$	-			\$	-
4 Suburban	Acre						\$	-			\$	-			\$	-
5 Undeveloped	Acre						\$	-			\$	-			\$	-
Right-of-Way Required for Stations, Maintenance & Parking Facilities																
6 Dense Urban	Acre	\$	2,786,321				\$	-			\$	-			\$	-
7 Urban	Acre	\$	1,371,510				\$	-			\$	-			\$	-
8 Dense Suburban	Acre	\$	908,134				\$	-			\$	-			\$	-
9 Suburban	Acre	\$	208,418				\$	-			\$	-			\$	-
10 Undeveloped	Acre	\$	3,642				\$	-			\$	-			\$	-
Environmental Mitigation = 3% Line Costs								\$	101,521		\$	2,441,447			\$	6,549,129
System Elements																
1 Signaling (ATC)	Mile	\$	2,070,000			0.76	\$	1,568,182		0.76	\$	1,568,182		0.76	\$	1,568,182
2 Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			0.76	\$	409,091		0.76	\$	409,091		0.76	\$	409,091
3 Wayside Protection System	Mile	\$	108,000			0.76	\$	81,818		0.76	\$	81,818		0.76	\$	81,818
Electrification Items																
1 Traction Power supply	Mile	\$	1,170,000			0.76	\$	886,364		0.76	\$	886,364		0.76	\$	886,364
2 Traction Power Distribution	Mile	\$	1,485,000			0.76	\$	1,125,000		0.76	\$	1,125,000		0.76	\$	1,125,000
								\$	7,556,024		\$	87,893,476			\$	228,923,883
Program Implementation Costs (per screening)								\$	1,926,786		\$	22,412,836			\$	58,375,590
Program Implementation Costs																
Contingencies (per screening) (25%)								\$	1,889,006		\$	21,973,369			\$	57,230,971
Subtotal								\$	11,371,817		\$	132,279,681			\$	344,530,443
Subtotal (Rounded)								\$	11,000,000		\$	132,000,000			\$	345,000,000

COST ELEMENTS			UNIT	UNIT PRICE	Elevated Viaduct				Open Trench				Covered Trench			
Subsection 3			Base: 2009 (3rd Quarter)	B				B				B				
				Start: 945 + 00	End: 1045 + 00	1.89 Miles		Start: 945 + 00	End: 1045 + 00	1.89 Miles		Start: 945 + 00	End: 1045 + 00	1.89 Miles		
Subsection Details					Quant.	Cost			Quant.	Cost			Quant.	Cost		
Double Track At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
Double Track Elevated (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Double Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
Four Track Elevated (Mile)				Start: 945 + 00	End: 1045 + 00	1.89 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
Four Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 945 + 00	End: 1045 + 00	1.89 Miles		
Four Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 945 + 00	End: 1045 + 00	1.89 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
Double Track Section - Total																
1	Double Track Section - At Grade	Mile	\$	2,100,224		0.00	\$	-		0.00	\$	-		0.00	\$	-
2	Double Track Section - On Structure	Mile	\$	4,700,160		0.00	\$	-		0.00	\$	-		0.00	\$	-
3	Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160		0.00	\$	-		0.00	\$	-		0.00	\$	-
4	Double Track Section - In Trench	Mile	\$	4,700,160		0.00	\$	-		0.00	\$	-		0.00	\$	-
Four Track Section - Total																
	Four-track Section - At Grade	Mile	\$	4,200,448		0.00	\$	-		0.00	\$	-		0.00	\$	-
	Four-Track Section - On Structure	Mile	\$	9,400,320		1.89	\$	17,803,636		0.00	\$	-		0.00	\$	-
	Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320		0.00	\$	-		0.00	\$	-		1.89	\$	17,803,636
	Four-Track Section - In Trench	Mile	\$	9,400,320		0.00	\$	-		1.89	\$	17,803,636		0.00	\$	-
Single Track - Total																
5	Single Track Section - At Grade	Mile	\$	1,549,312		0	\$	-		0	\$	-		0	\$	-
6	Single Track Section - On structure	Mile	\$	2,350,080		0	\$	-		0	\$	-		0	\$	-
7	Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080		0	\$	-		0	\$	-		0	\$	-
8	Single Track Section - In Trench	Mile	\$	2,350,080		0	\$	-		0	\$	-		0	\$	-
9	Freight Double Track - At Grade	Mile	\$	2,839,552		0	\$	-		0	\$	-		0	\$	-
10	Freight Single Track - At Grade	Mile	\$	1,549,312		0	\$	-		0	\$	-		0	\$	-
Earthwork Items																
1	Site Preparation - Undeveloped	Acre	\$	9,216		25.25	\$	232,727		25.25	\$	232,727		25.25	\$	232,727
2	Total Cut	CY	\$	6.00		0	\$	-		1629629.63	\$	9,777,778		1629629.63	\$	9,777,778
3	Total Fill	CY	\$	6.00		0	\$	-		0.00	\$	-		814814.81	\$	4,888,889
4	Borrow	CY	\$	13.00		0.00	\$	-		0.00	\$	-		0.00	\$	-
5	Spoil	CY	\$	13.00		0.00	\$	-		1629629.63	\$	21,185,185		814814.81	\$	10,592,593
6	Landscape erosion Control	Acre	\$	6,144		0.00	\$	-		25.25	\$	155,152		0.00	\$	-
7	Security Fencing (Both sides of ROW)	Mile	\$	144,384		0.00	\$	-		1.89	\$	273,455		0.00	\$	-
8	Special Drainage Facilities	5% Earthwork					\$	11,636			\$	1,581,215			\$	1,274,599
Structures, Tunnels, Walls																
1	Standard Structure	Mile	\$	34,972,672		1.89	\$	66,236,121		0	\$	-		0	\$	-
2	High Structure	Mile	\$	40,424,448			\$	-			\$	-			\$	-
3	Long Span Structure	Mile	\$	61,919,232			\$	-			\$	-			\$	-
4	Waterway Crossing - Primary	Mile	\$	85,342,208			\$	-			\$	-			\$	-
5	Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408		0.01	\$	697,344		0.01	\$	697,344		0.01	\$	697,344
6	Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264			\$	-			\$	-			\$	-
7	Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312			\$	-			\$	-			\$	-
8	Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896			\$	-			\$	-			\$	-
9	Double Track Drill & Blast	Mile	\$	146,887,680		0.00	\$	-		0	\$	-		0	\$	-
10	Double Track Mined (Soft Soil)	Mile	\$	79,200,000			\$	-			\$	-			\$	-
	Double Track TBM (<6 Miles)	Mile	\$	106,637,312												
	Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896												
11	Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952			\$	-			\$	-			\$	-
12	Crossovers	ea	\$	442,368			\$	-			\$	-			\$	-
13	Cut & Cover Double Track Tunnel	Mile	\$	131,246,080		0.00	\$	-		0	\$	-		0	\$	-
14	Trench Short	Mile	\$	78,843,904		0.00	\$	-		1.89	\$	149,325,576		0.00	\$	-
15	Trench Long	Mile	\$	57,524,224			\$	-			\$	-			\$	-
16	Mechanical & Electrical for Tunnels	Mile	\$	11,848,704			\$	-		0.00	\$	-		1.89	\$	22,440,727
17	Retaining Walls	Mile	\$	8,613,888		0.00	\$	-		1.89	\$	16,314,182		0.00	\$	-
18	Containment Walls	Mile	\$	5,907,456		0.00	\$	-		1.89	\$	11,188,364		0.00	\$	-
19	Single Track Cut and Cover Subway	Mile	\$	131,246,080			\$	-			\$	-			\$	-
	Four Track Drill & Blast	Mile	\$	293,775,360			\$	-			\$	-			\$	-
	Four Track Mined (Soft Soil)	Mile	\$	158,400,000			\$	-			\$	-			\$	-
	Four Track TBM (<6 Miles)	Mile	\$	213,274,624												
	Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792												
	Four Track Cut & Cover Tunnel	Mile	\$	262,492,160		0.00	\$	-		0.00	\$	-		1.89	\$	497,144,242
Grade Separations																
1	Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352			\$	-			\$	-			\$	-
	Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528			\$	-			\$	-			\$	-
2	Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680			\$	-			\$	-			\$	-
3	Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568			\$	-			\$	-			\$	-
4	Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520			\$	-			\$	-			\$	-
5	Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216			\$	-			\$	-			\$	-
	Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816			\$	-			\$	-			\$	-
6	Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328			\$	-			\$	-			\$	-
7	Street Bridging HSR Trench	ea	\$	1,398,784			\$	-		8	\$	11,190,272		0	\$	-
8	Minor Crossing Closures	ea	\$	87,040			\$	-			\$	-		0	\$	-
Building Items																

COST ELEMENTS			UNIT	UNIT PRICE	Elevated Viaduct				Open Trench				Covered Trench					
Subsection 3			Base: 2009 (3rd Quarter)	B				B				B						
				Start: 945 + 00	End: 1045 + 00	1.89 Miles		Start: 945 + 00	End: 1045 + 00	1.89 Miles		Start: 945 + 00	End: 1045 + 00	1.89 Miles				
Subsection Details						Quant.	Cost			Quant.	Cost			Quant.	Cost			
Double Track At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Double Track Elevated (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles				
Double Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles				
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles				
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Four Track Elevated (Mile)				Start: 945 + 00	End: 1045 + 00	1.89 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Four Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 945 + 00	End: 1045 + 00	1.89 Miles				
Four Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 945 + 00	End: 1045 + 00	1.89 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
1 Intermediate Passenger Stations	Each	\$	-				\$	-			\$	-			\$	-		
2 Terminal Passenger Stations	Each	\$	-				\$	-			\$	-			\$	-		
Caltrain Passenger Station - At-Grade	Each	\$	15,000,000				\$	-			\$	-			\$	-		
Caltrain Passenger Station - On Structure	Each	\$	15,000,000			2	\$	30,000,000			\$	-			\$	-		
Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000				\$	-			\$	-			\$	-		
Caltrain Passenger Station - In Trench	Each	\$	15,000,000				\$	-			2	\$	30,000,000		2	\$	30,000,000	
3 Maintenance Facility	Each	\$	123,921,884				\$	-			\$	-			\$	-		
4 Parking - Structures	space	\$	-				\$	-			\$	-			\$	-		
5 Parking - At Grade	space	\$	-				\$	-			\$	-			\$	-		
Rail & Utility Relocation																		
1 Single Track Relocation (Temporary)	Mile	\$	2,000,896				\$	-			\$	-			\$	-		
2 Single Track Relocation (Permanent)	Mile	\$	2,000,896				\$	-			\$	-			\$	-		
3 Single Track Removal	Mile	\$	130,048				\$	-			\$	-			\$	-		
4 Major Utility Relocations - Dense Urban	Mile	\$	1,548,288				\$	-			\$	-			\$	-		
5 Major Utility Relocations - Urban	Mile	\$	1,084,416				\$	-			\$	-			\$	-		
6 Major Utility Relocations - Dense Suburban	Mile	\$	775,168				\$	-			\$	-			\$	-		
7 Major Utility Relocations - Suburban	Mile	\$	464,896				\$	-			\$	-			\$	-		
8 Major Utility Relocations - Undeveloped	Mile	\$	30,720				\$	-			\$	-			\$	-		
ROW (Not Included)																		
ROW required for each segment																		
1 Dense Urban	Acre	\$	2,786,321				\$	-			\$	-			\$	-		
2 Urban	Acre	\$	1,371,510				\$	-			\$	-			\$	-		
3 Dense Suburban	Acre	\$	908,134				\$	-			\$	-			\$	-		
4 Suburban	Acre	\$	208,418				\$	-			\$	-			\$	-		
5 Undeveloped	Acre	\$	3,642				\$	-			\$	-			\$	-		
ROW required for Temp. Construction Easement																		
1 Dense Urban	Acre						\$	-			\$	-			\$	-		
2 Urban	Acre						\$	-			\$	-			\$	-		
3 Dense Suburban	Acre						\$	-			\$	-			\$	-		
4 Suburban	Acre						\$	-			\$	-			\$	-		
5 Undeveloped	Acre						\$	-			\$	-			\$	-		
Right-of-Way Required for Stations, Maintenance & Parking Facilities																		
6 Dense Urban	Acre	\$	2,786,321				\$	-			\$	-			\$	-		
7 Urban	Acre	\$	1,371,510				\$	-			\$	-			\$	-		
8 Dense Suburban	Acre	\$	908,134				\$	-			\$	-			\$	-		
9 Suburban	Acre	\$	208,418				\$	-			\$	-			\$	-		
10 Undeveloped	Acre	\$	3,642				\$	-			\$	-			\$	-		
Environmental Mitigation = 3% Line Costs							\$	3,449,444			\$	8,091,747			\$	17,845,576		
System Elements																		
1 Signaling (ATC)	Mile	\$	2,070,000			1.89	\$	3,920,455			1.89	\$	3,920,455		1.89	\$	3,920,455	
2 Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			1.89	\$	1,022,727			1.89	\$	1,022,727		1.89	\$	1,022,727	
3 Wayside Protection System	Mile	\$	108,000			1.89	\$	204,545			1.89	\$	204,545		1.89	\$	204,545	
Electrification Items																		
1 Traction Power supply	Mile	\$	1,170,000			1.89	\$	2,215,909			1.89	\$	2,215,909		1.89	\$	2,215,909	
2 Traction Power Distribution	Mile	\$	1,485,000			1.89	\$	2,812,500			1.89	\$	2,812,500		1.89	\$	2,812,500	
Program Implementation Costs (per screening)							\$	128,607,046			\$	287,992,768			\$	622,874,248		
Program Implementation Costs							\$	32,794,797			\$	73,438,156			\$	158,832,933		
Contingencies (per screening) (25%)							\$	32,151,761			\$	71,998,192			\$	155,718,562		
Subtotal							\$	193,553,604				\$	433,429,115				\$	937,425,744
Subtotal (Rounded)							\$	194,000,000				\$	433,000,000				\$	937,000,000

COST ELEMENTS			UNIT	UNIT PRICE	Elevated Viaduct				Open Trench				Covered Trench			
Subsection 3			Base: 2009 (3rd Quarter)	C				C				C				
				Start: 1045 + 00	End: 1087 + 00	0.80 Miles		Start: 1045 + 00	End: 1087 + 00	0.80 Miles		Start: 1045 + 00	End: 1087 + 00	0.80 Miles		
Subsection Details					Quant.	Cost			Quant.	Cost			Quant.	Cost		
Double Track At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Elevated (Mile)					Start: 1045 + 00	End: 1087 + 00	0.80 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1045 + 00	End: 1087 + 00	0.80 Miles	
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 1045 + 00	End: 1087 + 00	0.80 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Section - Total																
1	Double Track Section - At Grade	Mile	\$	2,100,224			0.00 \$	-			0.00 \$	-			0.00 \$	
2	Double Track Section - On Structure	Mile	\$	4,700,160			0.00 \$	-			0.00 \$	-			0.00 \$	
3	Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160			0.00 \$	-			0.00 \$	-			0.00 \$	
4	Double Track Section - In Trench	Mile	\$	4,700,160			0.00 \$	-			0.00 \$	-			0.00 \$	
Four Track Section - Total																
Four-track Section - At Grade			Mile	\$	4,200,448		0.00 \$	-			0.00 \$	-			0.00 \$	
Four-Track Section - On Structure			Mile	\$	9,400,320		0.80 \$	7,477,527			0.00 \$	-			0.00 \$	
Four-Track Section - In Tunnel or Subway			Mile	\$	9,400,320		0.00 \$	-			0.00 \$	-			0.80 \$	
Four-Track Section - In Trench			Mile	\$	9,400,320		0.00 \$	-			0.80 \$	7,477,527			0.00 \$	
Single Track - Total																
5	Single Track Section - At Grade	Mile	\$	1,549,312			0.00 \$	-			0 \$	-			0 \$	
6	Single Track Section - On structure	Mile	\$	2,350,080			0.00 \$	-			0 \$	-			0 \$	
7	Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080			0.00 \$	-			0 \$	-			0 \$	
8	Single Track Section - In Trench	Mile	\$	2,350,080			0.00 \$	-			0 \$	-			0 \$	
9	Freight Double Track - At Grade	Mile	\$	2,839,552			0.00 \$	-			0 \$	-			0 \$	
10	Freight Single Track - At Grade	Mile	\$	1,549,312			0.00 \$	-			0 \$	-			0 \$	
Earthwork Items																
1	Site Preparation - Undeveloped	Acre	\$	9,216			10.61 \$	97,745			10.61 \$	97,745			10.61 \$	
2	Total Cut	CY	\$	6.00			0.00 \$	-			684444.44 \$	4,106,667			684444.44 \$	
3	Total Fill	CY	\$	6.00			0.00 \$	-			0.00 \$	-			342222.22 \$	
4	Borrow	CY	\$	13.00			0.00 \$	-			0.00 \$	-			0.00 \$	
5	Spoil	CY	\$	13.00			0.00 \$	-			684444.44 \$	8,897,778			342222.22 \$	
6	Landscape erosion Control	Acre	\$	6,144			0.00 \$	-			10.61 \$	65,164			0.00 \$	
7	Security Fencing (Both sides of ROW)	Mile	\$	144,384			0.00 \$	-			0.80 \$	114,851			0.00 \$	
8	Special Drainage Facilities	5% Earthwork					\$	4,887			\$	664,110			\$	
Structures, Tunnels, Walls																
1	Standard Structure	Mile	\$	34,972,672			0.80 \$	27,819,171			0 \$	-			0 \$	
2	High Structure	Mile	\$	40,424,448			\$	-			\$	-			\$	
3	Long Span Structure	Mile	\$	61,919,232			\$	-			\$	-			\$	
4	Waterway Crossing - Primary	Mile	\$	85,342,208			\$	-			\$	-			\$	
5	Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408			\$	-			\$	-			\$	
6	Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264			\$	-			0.01 \$	697,344			0.01 \$	
7	Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312			\$	-			\$	-			\$	
8	Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896			\$	-			\$	-			\$	
9	Double Track Drill & Blast	Mile	\$	146,887,680			0.00 \$	-			0 \$	-			0 \$	
10	Double Track Mined (Soft Soil)	Mile	\$	79,200,000			\$	-			\$	-			\$	
	Double Track TBM (<6 Miles)	Mile	\$	106,637,312												
	Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896												
11	Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952			\$	-			\$	-			\$	
12	Crossovers	ea	\$	442,368			\$	-			\$	-			\$	
13	Cut & Cover Double Track Tunnel	Mile	\$	131,246,080			0.00 \$	-			0 \$	-			0 \$	
14	Trench Short	Mile	\$	78,843,904			0.00 \$	-			0.80 \$	62,716,742			0.00 \$	
15	Trench Long	Mile	\$	57,524,224			\$	-			\$	-			\$	
16	Mechanical & Electrical for Tunnels	Mile	\$	11,848,704			\$	-			0.00 \$	-			0.80 \$	
17	Retaining Walls	Mile	\$	8,613,888			0.00 \$	-			0.80 \$	6,851,956			0.00 \$	
18	Containment Walls	Mile	\$	5,907,456			0.00 \$	-			0.80 \$	4,699,113			0.00 \$	
19	Single Track Cut and Cover Subway	Mile	\$	131,246,080			\$	-			\$	-			\$	
	Four Track Drill & Blast	Mile	\$	293,775,360			\$	-			\$	-			\$	
	Four Track Mined (Soft Soil)	Mile	\$	158,400,000			\$	-			\$	-			\$	
	Four Track TBM (<6 Miles)	Mile	\$	213,274,624												
	Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792												
	Four Track Cut & Cover Tunnel	Mile	\$	262,492,160			0.00 \$	-			0.00 \$	-			0.80 \$	
Grade Separations																
1	Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352			\$	-			\$	-			\$	
	Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528			\$	-			\$	-			\$	
2	Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680			\$	-			\$	-			\$	
3	Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568			\$	-			\$	-			\$	
4	Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520			\$	-			\$	-			\$	
5	Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216			\$	-			\$	-			\$	
	Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816			\$	-			\$	-			\$	
6	Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328			\$	-			\$	-			\$	
7	Street Bridging HSR Trench	ea	\$	1,398,784			\$	-			6 \$	8,392,704			\$	
8	Minor Crossing Closures	ea	\$	87,040			\$	-			\$	-			\$	
Building Items																

COST ELEMENTS			UNIT	UNIT PRICE	Elevated Viaduct			Open Trench				Covered Trench							
Subsection 3			Base: 2009 (3rd Quarter)	C			C				C								
				Start: 1045 + 00	End: 1087 + 00	0.80 Miles	Start: 1045 + 00	End: 1087 + 00	0.80 Miles	Start: 1045 + 00	End: 1087 + 00	0.80 Miles							
Subsection Details						Quant.	Cost			Quant.	Cost			Quant.	Cost				
Double Track At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles				
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles				
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles				
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Four Track Elevated (Mile)					Start: 1045 + 00	End: 1087 + 00	0.80 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1045 + 00	End: 1087 + 00	0.80 Miles				
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 1045 + 00	End: 1087 + 00	0.80 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
1 Intermediate Passenger Stations	Each	\$	-				\$	-			\$	-			\$	-			
2 Terminal Passenger Stations	Each	\$	-				\$	-			\$	-			\$	-			
Caltrain Passenger Station - At-Grade	Each	\$	15,000,000				\$	-			\$	-			\$	-			
Caltrain Passenger Station - On Structure	Each	\$	15,000,000			1	\$	15,000,000			\$	-			\$	-			
Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000				\$	-			\$	-			\$	-			
Caltrain Passenger Station - In Trench	Each	\$	15,000,000				\$	-		1	\$	15,000,000		1	\$	15,000,000			
3 Maintenance Facility	Each	\$	123,921,884				\$	-			\$	-			\$	-			
4 Parking - Structures	space	\$	-				\$	-			\$	-			\$	-			
5 Parking - At Grade	space	\$	-				\$	-			\$	-			\$	-			
Rail & Utility Relocation																			
1 Single Track Relocation (Temporary)	Mile	\$	2,000,896				\$	-			\$	-			\$	-			
2 Single Track Relocation (Permanent)	Mile	\$	2,000,896				\$	-			\$	-			\$	-			
3 Single Track Removal	Mile	\$	130,048				\$	-			\$	-			\$	-			
4 Major Utility Relocations - Dense Urban	Mile	\$	1,548,288				\$	-			\$	-			\$	-			
5 Major Utility Relocations - Urban	Mile	\$	1,084,416				\$	-			\$	-			\$	-			
6 Major Utility Relocations - Dense Suburban	Mile	\$	775,168				\$	-			\$	-			\$	-			
7 Major Utility Relocations - Suburban	Mile	\$	464,896				\$	-			\$	-			\$	-			
8 Major Utility Relocations - Undeveloped	Mile	\$	30,720				\$	-			\$	-			\$	-			
ROW (Not Included)																			
ROW required for each segment																			
1 Dense Urban	Acre	\$	2,786,321				\$	-			\$	-			\$	-			
2 Urban	Acre	\$	1,371,510				\$	-			\$	-			\$	-			
3 Dense Suburban	Acre	\$	908,134				\$	-			\$	-			\$	-			
4 Suburban	Acre	\$	208,418				\$	-			\$	-			\$	-			
5 Undeveloped	Acre	\$	3,642				\$	-			\$	-			\$	-			
ROW required for Temp. Construction Easement																			
1 Dense Urban	Acre						\$	-			\$	-			\$	-			
2 Urban	Acre						\$	-			\$	-			\$	-			
3 Dense Suburban	Acre						\$	-			\$	-			\$	-			
4 Suburban	Acre						\$	-			\$	-			\$	-			
5 Undeveloped	Acre						\$	-			\$	-			\$	-			
Right-of-Way Required for Stations, Maintenance & Parking Facilities																			
6 Dense Urban	Acre	\$	2,786,321				\$	-			\$	-			\$	-			
7 Urban	Acre	\$	1,371,510				\$	-			\$	-			\$	-			
8 Dense Suburban	Acre	\$	908,134				\$	-			\$	-			\$	-			
9 Suburban	Acre	\$	208,418				\$	-			\$	-			\$	-			
10 Undeveloped	Acre	\$	3,642				\$	-			\$	-			\$	-			
Environmental Mitigation = 3% Line Costs							\$	1,511,980			\$	3,593,451			\$	7,579,276			
System Elements																			
1 Signaling (ATC)	Mile	\$	2,070,000			0.80	\$	1,646,591			0.80	\$	1,646,591		0.80	\$	1,646,591		
2 Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			0.80	\$	429,545			0.80	\$	429,545		0.80	\$	429,545		
3 Wayside Protection System	Mile	\$	108,000			0.80	\$	85,909			0.80	\$	85,909		0.80	\$	85,909		
Electrification Items																			
1 Traction Power supply	Mile	\$	1,170,000			0.80	\$	930,682			0.80	\$	930,682		0.80	\$	930,682		
2 Traction Power Distribution	Mile	\$	1,485,000			0.80	\$	1,181,250			0.80	\$	1,181,250		0.80	\$	1,181,250		
Program Implementation Costs (per screening)							\$	56,185,288			\$	127,649,129			\$	264,495,778			
Program Implementation Costs							\$	14,327,248			\$	32,550,528			\$	67,446,423			
Contingencies (per screening) (25%)							\$	14,046,322			\$	31,912,282			\$	66,123,944			
Subtotal								\$	84,558,859				\$	192,111,939				\$	398,066,145
Subtotal (Rounded)								\$	85,000,000				\$	192,000,000				\$	398,000,000

COST ELEMENTS			UNIT	UNIT PRICE	Elevated Viaduct				Open Trench				Covered Trench			
Subsection 3			Base: 2009 (3rd Quarter)		D				D				D			
					Start: 1087 + 00	End: 1140 + 00	1.00 Miles		Start: 1087 + 00	End: 1140 + 00	1.00 Miles		Start: 1087 + 00	End: 1140 + 00	1.00 Miles	
Subsection Details					Quant.	Cost			Quant.	Cost			Quant.	Cost		
Double Track At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Elevated (Mile)					Start: 1087 + 00	End: 1140 + 00	1.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1087 + 00	End: 1140 + 00	1.00 Miles	
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 1087 + 00	End: 1140 + 00	1.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Section - Total																
1 Double Track Section - At Grade	Mile	\$	2,100,224				0.00 \$	-			0.00 \$	-			0.00 \$	-
2 Double Track Section - On Structure	Mile	\$	4,700,160				0.00 \$	-			0.00 \$	-			0.00 \$	-
3 Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160				0.00 \$	-			0.00 \$	-			0.00 \$	-
4 Double Track Section - In Trench	Mile	\$	4,700,160				0.00 \$	-			0.00 \$	-			0.00 \$	-
Four Track Section - Total																
Four-track Section - At Grade	Mile	\$	4,200,448				0.00 \$	-			0.00 \$	-			0.00 \$	-
Four-Track Section - On Structure	Mile	\$	9,400,320				1.00 \$	9,435,927			0.00 \$	-			0.00 \$	-
Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320				0.00 \$	-			0.00 \$	-			1.00 \$	9,435,927
Four-Track Section - In Trench	Mile	\$	9,400,320				0.00 \$	-			1.00 \$	9,435,927			0.00 \$	-
Single Track - Total																
5 Single Track Section - At Grade	Mile	\$	1,549,312				0.00 \$	-			0 \$	-			0 \$	-
6 Single Track Section - On structure	Mile	\$	2,350,080				0.00 \$	-			0 \$	-			0 \$	-
7 Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080				0.00 \$	-			0 \$	-			0 \$	-
8 Single Track Section - In Trench	Mile	\$	2,350,080				0.00 \$	-			0 \$	-			0 \$	-
9 Freight Double Track - At Grade	Mile	\$	2,839,552				0.00 \$	-			0 \$	-			0 \$	-
10 Freight Single Track - At Grade	Mile	\$	1,549,312				0.00 \$	-			0 \$	-			0 \$	-
Earthwork Items																
1 Site Preparation - Undeveloped	Acre	\$	9,216				13.38 \$	123,345			13.38 \$	123,345			13.38 \$	123,345
2 Total Cut	CY	\$	6.00				0.00 \$	-			863703.70 \$	5,182,222			863703.70 \$	5,182,222
3 Total Fill	CY	\$	6.00				0.00 \$	-			0.00 \$	-			431851.85 \$	2,591,111
4 Borrow	CY	\$	13.00				0.00 \$	-			0.00 \$	-			0.00 \$	-
5 Spoil	CY	\$	13.00				0.00 \$	-			863703.70 \$	11,228,148			431851.85 \$	5,614,074
6 Landscape erosion Control	Acre	\$	6,144				0.00 \$	-			13.38 \$	82,230			0.00 \$	-
7 Security Fencing (Both sides of ROW)	Mile	\$	144,384				0.00 \$	-			1.00 \$	144,931			0.00 \$	-
8 Special Drainage Facilities	5% Earthwork						\$	6,167			\$	838,044			\$	675,538
Structures, Tunnels, Walls																
1 Standard Structure	Mile	\$	34,972,672				1.00 \$	35,105,144			0 \$	-			0 \$	-
2 High Structure	Mile	\$	40,424,448				\$	-			\$	-			\$	-
3 Long Span Structure	Mile	\$	61,919,232				\$	-			\$	-			\$	-
4 Waterway Crossing - Primary	Mile	\$	85,342,208				\$	-			\$	-			\$	-
5 Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408				\$	-			0.01 \$	697,344			0.01 \$	697,344
6 Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264				\$	-			\$	-			\$	-
7 Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312				\$	-			\$	-			\$	-
8 Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896				\$	-			\$	-			\$	-
9 Double Track Drill & Blast	Mile	\$	146,887,680				0.00 \$	-			0 \$	-			0 \$	-
10 Double Track Mined (Soft Soil)	Mile	\$	79,200,000				\$	-			\$	-			\$	-
Double Track TBM (<6 Miles)	Mile	\$	106,637,312													
Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896													
11 Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952				\$	-			\$	-			\$	-
12 Crossovers	ea	\$	442,368				\$	-			\$	-			\$	-
13 Cut & Cover Double Track Tunnel	Mile	\$	131,246,080				0.00 \$	-			0 \$	-			0 \$	-
14 Trench Short	Mile	\$	78,843,904				0.00 \$	-			1.00 \$	79,142,555			0.00 \$	-
15 Trench Long	Mile	\$	57,524,224				\$	-			\$	-			\$	-
16 Mechanical & Electrical for Tunnels	Mile	\$	11,848,704				\$	-			0.00 \$	-			1.00 \$	11,893,585
17 Retaining Walls	Mile	\$	8,613,888				0.00 \$	-			1.00 \$	8,646,516			0.00 \$	-
18 Containment Walls	Mile	\$	5,907,456				0.00 \$	-			1.00 \$	5,929,833			0.00 \$	-
19 Single Track Cut and Cover Subway	Mile	\$	131,246,080				\$	-			\$	-			\$	-
Four Track Drill & Blast	Mile	\$	293,775,360				\$	-			\$	-			\$	-
Four Track Mined (Soft Soil)	Mile	\$	158,400,000				\$	-			\$	-			\$	-
Four Track TBM (<6 Miles)	Mile	\$	213,274,624													
Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792													
Four Track Cut & Cover Tunnel	Mile	\$	262,492,160				0.00 \$	-			0.00 \$	-			1.00 \$	263,486,448
Grade Separations																
1 Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352				\$	-			\$	-			\$	-
Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528				2 \$	39,853,056			\$	-			\$	-
2 Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680				4 \$	11,038,720			\$	-			\$	-
3 Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568				\$	-			\$	-			\$	-
4 Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520				\$	-			\$	-			\$	-
5 Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216				\$	-			\$	-			\$	-
Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816				\$	-			\$	-			\$	-
6 Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328				\$	-			\$	-			\$	-
7 Street Bridging HSR Trench	ea	\$	1,398,784				\$	-			6 \$	8,392,704			\$	-
8 Minor Crossing Closures	ea	\$	87,040				\$	-			\$	-			\$	-

COST ELEMENTS			UNIT	UNIT PRICE	Elevated Viaduct				Open Trench				Covered Trench					
Subsection 3			Base: 2009 (3rd Quarter)	D				D				D						
				Start: 1087 + 00	End: 1140 + 00	1.00 Miles		Start: 1087 + 00	End: 1140 + 00	1.00 Miles		Start: 1087 + 00	End: 1140 + 00	1.00 Miles				
Subsection Details						Quant.	Cost			Quant.	Cost			Quant.	Cost			
Double Track At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Double Track Elevated (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles				
Double Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles				
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles				
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Four Track Elevated (Mile)				Start: 1087 + 00	End: 1140 + 00	1.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Four Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1087 + 00	End: 1140 + 00	1.00 Miles				
Four Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 1087 + 00	End: 1140 + 00	1.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
1	Building Items																	
1	Intermediate Passenger Stations	Each	\$	-							\$	-			\$	-		
2	Terminal Passenger Stations	Each	\$	-							\$	-			\$	-		
	Caltrain Passenger Station - At-Grade	Each	\$	15,000,000							\$	-			\$	-		
	Caltrain Passenger Station - On Structure	Each	\$	15,000,000			1	\$	15,000,000		\$	-			\$	-		
	Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000				\$	-		\$	-			\$	-		
	Caltrain Passenger Station - In Trench	Each	\$	15,000,000							\$	-			\$	-		
3	Maintenance Facility	Each	\$	123,921,884							\$	15,000,000		1	\$	15,000,000		
4	Parking - Structures	space	\$	-							\$	-			\$	-		
5	Parking - At Grade	space	\$	-							\$	-			\$	-		
Rail & Utility Relocation																		
1	Single Track Relocation (Temporary)	Mile	\$	2,000,896				\$	-		\$	-			\$	-		
2	Single Track Relocation (Permanent)	Mile	\$	2,000,896				\$	-		\$	-			\$	-		
3	Single Track Removal	Mile	\$	130,048				\$	-		\$	-			\$	-		
4	Major Utility Relocations - Dense Urban	Mile	\$	1,548,288				\$	-		\$	-			\$	-		
5	Major Utility Relocations - Urban	Mile	\$	1,084,416				\$	-		\$	-			\$	-		
6	Major Utility Relocations - Dense Suburban	Mile	\$	775,168				\$	-		\$	-			\$	-		
7	Major Utility Relocations - Suburban	Mile	\$	464,896				\$	-		\$	-			\$	-		
8	Major Utility Relocations - Undeveloped	Mile	\$	30,720				\$	-		\$	-			\$	-		
ROW (Not Included)																		
ROW required for each segment																		
1	Dense Urban	Acre	\$	2,786,321				\$	-		\$	-			\$	-		
2	Urban	Acre	\$	1,371,510				\$	-		\$	-			\$	-		
3	Dense Suburban	Acre	\$	908,134				\$	-		\$	-			\$	-		
4	Suburban	Acre	\$	208,418				\$	-		\$	-			\$	-		
5	Undeveloped	Acre	\$	3,642				\$	-		\$	-			\$	-		
ROW required for Temp. Construction Easement																		
1	Dense Urban	Acre						\$	-		\$	-			\$	-		
2	Urban	Acre						\$	-		\$	-			\$	-		
3	Dense Suburban	Acre						\$	-		\$	-			\$	-		
4	Suburban	Acre						\$	-		\$	-			\$	-		
5	Undeveloped	Acre						\$	-		\$	-			\$	-		
Right-of-Way Required for Stations, Maintenance & Parking Facilities																		
6	Dense Urban	Acre	\$	2,786,321				\$	-		\$	-			\$	-		
7	Urban	Acre	\$	1,371,510				\$	-		\$	-			\$	-		
8	Dense Suburban	Acre	\$	908,134				\$	-		\$	-			\$	-		
9	Suburban	Acre	\$	208,418				\$	-		\$	-			\$	-		
10	Undeveloped	Acre	\$	3,642				\$	-		\$	-			\$	-		
Environmental Mitigation = 3% Line Costs								\$	3,316,871			\$	4,345,314			\$	9,440,988	
System Elements																		
1	Signaling (ATC)	Mile	\$	2,070,000			1.00	\$	2,077,841			1.00	\$	2,077,841		1.00	\$	2,077,841
2	Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			1.00	\$	542,045			1.00	\$	542,045		1.00	\$	542,045
3	Wayside Protection System	Mile	\$	108,000			1.00	\$	108,409			1.00	\$	108,409		1.00	\$	108,409
Electrification Items																		
1	Traction Power supply	Mile	\$	1,170,000			1.00	\$	1,174,432			1.00	\$	1,174,432		1.00	\$	1,174,432
2	Traction Power Distribution	Mile	\$	1,485,000			1.00	\$	1,490,625			1.00	\$	1,490,625		1.00	\$	1,490,625
Subtotal								\$	119,272,583			\$	154,582,467			\$	329,533,936	
Program Implementation Costs (per screening)								\$	30,414,509			\$	39,418,529			\$	84,031,154	
Program Implementation Costs																		
Contingencies (per screening) (25%)								\$	29,818,146			\$	38,645,617			\$	82,383,484	
Subtotal								\$	179,505,238			\$	232,646,612			\$	495,948,573	
Subtotal (Rounded)								\$	180,000,000			\$	233,000,000			\$	496,000,000	

COST ELEMENTS		UNIT	UNIT PRICE	At-Grade			
Subsection 3			Base: 2009 (3rd Quarter)	E			
				Start: 1140 + 00	End: 1164 + 00	0.45 Miles	
Subsection Details						Quant.	Cost
Double Track At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)				Start: 0 + 00		0.00 Miles	
Double Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles	
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 1140 + 00	End: 1164 + 00	0.45 Miles	
Four Track Elevated (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles	
Four Track Trench (Mile)				Start: 0 + 00		0.00 Miles	
Double Track Section - Total							
1 Double Track Section - At Grade	Mile	\$	2,100,224			0.00	\$ -
2 Double Track Section - On Structure	Mile	\$	4,700,160			0.00	\$ -
3 Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160			0.00	\$ -
4 Double Track Section - In Trench	Mile	\$	4,700,160			0.00	\$ -
Four Track Section - Total							
Four-track Section - At Grade	Mile	\$	4,200,448			0.45	\$ 1,909,295
Four-Track Section - On Structure	Mile	\$	9,400,320			0.00	\$ -
Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320			0	\$ -
Four-Track Section - In Trench	Mile	\$	9,400,320			0	\$ -
Single Track - Total							
5 Single Track Section - At Grade	Mile	\$	1,549,312			0	\$ -
6 Single Track Section - On structure	Mile	\$	2,350,080			0	\$ -
7 Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080			0	\$ -
8 Single Track Section - In Trench	Mile	\$	2,350,080			0	\$ -
9 Freight Double Track - At Grade	Mile	\$	2,839,552			0	\$ -
10 Freight Single Track - At Grade	Mile	\$	1,549,312			0	\$ -
Earthwork Items							
1 Site Preparation - Undeveloped	Acre	\$	9,216			0.00	\$ -
2 Total Cut	CY	\$	6.00			0.00	\$ -
3 Total Fill	CY	\$	6.00			0.00	\$ -
4 Borrow	CY	\$	13.00			0.00	\$ -
5 Spoil	CY	\$	13.00			0.00	\$ -
6 Landscape erosion Control	Acre	\$	6,144			0.00	\$ -
7 Security Fencing (Both sides of ROW)	Mile	\$	144,384			0.45	\$ 65,629
8 Special Drainage Facilities	5% Earthwork						\$ 3,281
Structures, Tunnels, Walls							
1 Standard Structure	Mile	\$	34,972,672			0.00	\$ -
2 High Structure	Mile	\$	40,424,448				\$ -
3 Long Span Structure	Mile	\$	61,919,232				\$ -
4 Waterway Crossing - Primary	Mile	\$	85,342,208				\$ -
5 Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408				\$ -
6 Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264				\$ -
7 Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312				\$ -
8 Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896				\$ -
9 Double Track Drill & Blast	Mile	\$	146,887,680			0	\$ -
10 Double Track Mined (Soft Soil)	Mile	\$	79,200,000				\$ -
Double Track TBM (<6 Miles)	Mile	\$	106,637,312				
Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896				
11 Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952				\$ -
12 Crossovers	ea	\$	442,368				\$ -
13 Cut & Cover Double Track Tunnel	Mile	\$	131,246,080			0	\$ -
14 Trench Short	Mile	\$	78,843,904			0	\$ -
15 Trench Long	Mile	\$	57,524,224				\$ -
16 Mechanical & Electrical for Tunnels	Mile	\$	11,848,704			0	\$ -
17 Retaining Walls	Mile	\$	8,613,888			0	\$ -
18 Containment Walls	Mile	\$	5,907,456			0	\$ -
19 Single Track Cut and Cover Subway	Mile	\$	131,246,080				\$ -
Four Track Drill & Blast	Mile	\$	293,775,360				\$ -
Four Track Mined (Soft Soil)	Mile	\$	158,400,000				\$ -
Four Track TBM (<6 Miles)	Mile	\$	213,274,624				
Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792				
Four Track Cut & Cover Tunnel	Mile	\$	262,492,160			0.00	\$ -
Grade Separations							
1 Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352				\$ -
Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528				\$ -
2 Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680				\$ -
3 Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568				\$ -
4 Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520				\$ -
5 Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216				\$ -
Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816				\$ -
6 Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328				\$ -
7 Street Bridging HSR Trench	ea	\$	1,398,784				\$ -
8 Minor Crossing Closures	ea	\$	87,040				\$ -

COST ELEMENTS		UNIT	UNIT PRICE	At-Grade		
Subsection 3			Base: 2009 (3rd Quarter)	E		
				Start: 1140 + 00	End: 1164 + 00	0.45 Miles
Subsection Details					Quant.	Cost
Double Track At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles
Double Track Elevated (Mile)				Start: 0 + 00		0.00 Miles
Double Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 1140 + 00	End: 1164 + 00	0.45 Miles
Four Track Elevated (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles
Four Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles
Four Track Trench (Mile)				Start: 0 + 00		0.00 Miles
Building Items						
1 Intermediate Passenger Stations	Each	\$	-			\$ -
2 Terminal Passenger Stations	Each	\$	-			\$ -
Caltrain Passenger Station - At-Grade	Each	\$	15,000,000			1 \$ 15,000,000
Caltrain Passenger Station - On Structure	Each	\$	15,000,000			\$ -
Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000			\$ -
Caltrain Passenger Station - In Trench	Each	\$	15,000,000			\$ -
3 Maintenance Facility	Each	\$	123,921,884			\$ -
4 Parking - Structures	space	\$	-			\$ -
5 Parking - At Grade	space	\$	-			\$ -
Rail & Utility Relocation						
1 Single Track Relocation (Temporary)	Mile	\$	2,000,896			\$ -
2 Single Track Relocation (Permanent)	Mile	\$	2,000,896			\$ -
3 Single Track Removal	Mile	\$	130,048			\$ -
4 Major Utility Relocations - Dense Urban	Mile	\$	1,548,288			\$ -
5 Major Utility Relocations - Urban	Mile	\$	1,084,416			\$ -
6 Major Utility Relocations - Dense Suburban	Mile	\$	775,168			\$ -
7 Major Utility Relocations - Suburban	Mile	\$	464,896			\$ -
8 Major Utility Relocations - Undeveloped	Mile	\$	30,720			\$ -
ROW (Not Included)						
ROW required for each segment						
1 Dense Urban	Acre	\$	2,786,321			\$ -
2 Urban	Acre	\$	1,371,510			\$ -
3 Dense Suburban	Acre	\$	908,134			\$ -
4 Suburban	Acre	\$	208,418			\$ -
5 Undeveloped	Acre	\$	3,642			\$ -
ROW required for Temp. Construction Easement						
1 Dense Urban	Acre					\$ -
2 Urban	Acre					\$ -
3 Dense Suburban	Acre					\$ -
4 Suburban	Acre					\$ -
5 Undeveloped	Acre					\$ -
Right-of-Way Required for Stations, Maintenance & Parking Facilities						
6 Dense Urban	Acre	\$	2,786,321			\$ -
7 Urban	Acre	\$	1,371,510			\$ -
8 Dense Suburban	Acre	\$	908,134			\$ -
9 Suburban	Acre	\$	208,418			\$ -
10 Undeveloped	Acre	\$	3,642			\$ -
Environmental Mitigation = 3% Line Costs						\$ 509,346
System Elements						
1 Signaling (ATC)	Mile	\$	2,070,000			0.45 \$ 940,909
2 Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			0.45 \$ 245,455
3 Wayside Protection System	Mile	\$	108,000			0.45 \$ 49,091
Electrification Items						
1 Traction Power supply	Mile	\$	1,170,000			0.45 \$ 531,818
2 Traction Power Distribution	Mile	\$	1,485,000			0.45 \$ 675,000
Subtotal						\$ 19,929,824
Program Implementation Costs (per screening)						\$ 5,082,105
Program Implementation Costs						
Contingencies (per screening) (25%)						\$ 4,982,456
Subtotal						\$ 29,994,385
Subtotal (Rounded)						\$ 30,000,000

Subsection 4	4A (0.7 miles)	4B1 (1.3 miles)	4B2 (3.4 miles)				
	Berm	Berm	Aerial Viaduct	At Grade	Open Trench/Tunnel	Covered Trench/Tunnel	Deep Tunnel (HST Only)
Capital Cost (\$2009 in Millions) does not include ROW	\$40	\$105	\$326 (4 tracks)	\$124 (4 tracks) \$28 (2 tracks)	\$682 (4 tracks)	\$1,637 (4 tracks)	\$1,502 (2 tracks)
Acquisition Cost of Permanent ROW	Medium	Medium	Medium	Highest	Lowest	Lowest	Lowest
Notes:		1. Caltrain Hillsdale Station. 2. New 28th Ave extension	4 tracks - 1. Raise Ralston Ave, Harbor Blvd, F St, and Holly St to smooth profile; 2. Caltrain Belmont and San Carlos stations;	4 tracks - 1. Caltrain Belmont and San Carlos stations. 2 tracks - 1. Electrification only. <i>2. Must be combined with 2 track deep tunnel option.</i>	4 tracks - 1. Raise Ralston Ave, Harbor Blvd, F St, and Holly St to smooth profile; 2. Caltrain Belmont and San Carlos stations;	4 tracks - 1. Raise Ralston Ave, Harbor Blvd, F St, and Holly St to smooth profile; 2. Caltrain Belmont and San Carlos stations;	2 tracks - 1. This option would leave existing Caltrain unchanged because subsection already grade separated. <i>2. Must be combined with 2 track at grade option.</i>

Subsection 4	4C (1.6 miles)				4D (0.6 miles)				
	Aerial Viaduct	Open Trench	Covered Trench/Tunnel	Deep Tunnel (HST Only)	Aerial Viaduct (HST Only)	At Grade (Caltrain Only)	Open Trench (HST Only)	Covered Trench/Tunnel (HST Only)	Deep Tunnel (HST Only)
Capital Cost (\$2009 in Millions) does not include ROW	\$157 (4 tracks); \$111 (2 tracks)	\$325 (4 tracks)	\$765 (4 tracks)	\$336 (2 tracks)	\$30 (2 tracks)	\$7 (2 tracks)	\$105 (2 tracks)	\$152 (2 tracks)	\$121 (2 tracks)
Acquisition Cost of Permanent ROW	Medium	Medium	Lowest	Lowest	Medium	Highest	Medium	Lowest	Lowest
Notes:	4 tracks - 1. Caltrain Redwood City Station. 2. Potential HST Redwood City station (costs not included). 2 tracks - 1. Caltrain Redwood City Station. 2. Potential HST Redwood City station (costs not included). 3. <i>Must be combined with 2 track deep tunnel option.</i>	4 tracks - 1. Caltrain Redwood City Station. 2. Potential HST Redwood City station (costs not included). 3. Raise Jefferson Ave to smooth profile.	4 tracks - 1. Caltrain Redwood City Station. 2. Potential HST Redwood City station (costs not included). 3. Raise Jefferson Ave to smooth profile.	2 tracks - 1. No potential HST Redwood City station. 2. Two tracks only. 3. <i>Must be combined with 2 track aerial viaduct option.</i>	2 tracks - 1. Convert Woodside Road overpass to underpass. 2. Two tracks only. 3. <i>Must be combined with 2 track at grade option.</i>	2 tracks - 1. Existing 4-track alignment. 2. <i>Must be combined with 2 track aerial viaduct or trench or tunnel option.</i>	2 tracks - 1. <i>Must be combined with 2 track at grade option.</i>	2 tracks - 1. <i>Must be combined with 2 track at grade option.</i>	2 tracks - 1. <i>Must be combined with 2 track aerial viaduct option.</i>

COST ELEMENTS			UNIT	UNIT PRICE	Berm			
Subsection 4			Base: 2009 (3rd Quarter)	A				
				Start: 1164 + 00	End: 1200 + 00	0.68 Miles		
Subsection Details						Quant.	Cost	
Double Track At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles		
Double Track Elevated (Mile)				Start: 0 + 00		0.00 Miles		
Double Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles		
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 1164 + 00	End: 1182 + 00	0.34 Miles		
Four Track Elevated (Mile)				Start: 1182 + 00	End: 1200 + 00	0.34 Miles		
Four Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		
Four Track Trench (Mile)				Start: 0 + 00		0.00 Miles		
Double Track Section - Total								
1 Double Track Section - At Grade	Mile	\$	2,100,224			0.00	\$ -	
2 Double Track Section - On Structure	Mile	\$	4,700,160			0.00	\$ -	
3 Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160			0.00	\$ -	
4 Double Track Section - In Trench	Mile	\$	4,700,160			0.00	\$ -	
Four Track Section - Total								
Four-track Section - At Grade	Mile	\$	4,200,448			0.34	\$ 1,431,971	
Four-Track Section - On Structure	Mile	\$	9,400,320			0.34	\$ 3,204,655	
Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320			0.00	\$ -	
Four-Track Section - In Trench	Mile	\$	9,400,320			0.00	\$ -	
Single Track - Total								
5 Single Track Section - At Grade	Mile	\$	1,549,312			0.00	\$ -	
6 Single Track Section - On structure	Mile	\$	2,350,080			0.00	\$ -	
7 Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080			0.00	\$ -	
8 Single Track Section - In Trench	Mile	\$	2,350,080			0.00	\$ -	
9 Freight Double Track - At Grade	Mile	\$	2,839,552			0.00	\$ -	
10 Freight Single Track - At Grade	Mile	\$	1,549,312			0.00	\$ -	
Earthwork Items								
1 Site Preparation - Undeveloped	Acre	\$	9,216			12.88	\$ 118,702	
2 Total Cut	CY	\$	6.00			0.00	\$ -	
3 Total Fill	CY	\$	6.00			133333.33	\$ 800,000	
4 Borrow	CY	\$	13.00			133333.33	\$ 1,733,333	
5 Spoil	CY	\$	13.00			0.00	\$ -	
6 Landscape erosion Control	Acre	\$	6,144			12.88	\$ 79,135	
7 Security Fencing (Both sides of ROW)	Mile	\$	144,384			0.68	\$ 98,444	
8 Special Drainage Facilities	5% Earthwork						\$ 141,481	
Structures, Tunnels, Walls								
1 Standard Structure	Mile	\$	34,972,672			0.34	\$ 11,922,502	
2 High Structure	Mile	\$	40,424,448				\$ -	
3 Long Span Structure	Mile	\$	61,919,232				\$ -	
4 Waterway Crossing - Primary	Mile	\$	85,342,208				\$ -	
5 Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408				\$ -	
6 Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264				\$ -	
7 Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312				\$ -	
8 Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896				\$ -	
9 Double Track Drill & Blast	Mile	\$	146,887,680			0.00	\$ -	
10 Double Track Mined (Soft Soil)	Mile	\$	79,200,000				\$ -	
Double Track TBM (<6 Miles)	Mile	\$	106,637,312					
Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896					
11 Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952				\$ -	
12 Crossovers	ea	\$	442,368				\$ -	
13 Cut & Cover Double Track Tunnel	Mile	\$	131,246,080			0.00	\$ -	
14 Trench Short	Mile	\$	78,843,904			0.00	\$ -	
15 Trench Long	Mile	\$	57,524,224				\$ -	
16 Mechanical & Electrical for Tunnels	Mile	\$	11,848,704				\$ -	
17 Retaining Walls	Mile	\$	8,613,888			0.34	\$ 2,936,553	
18 Containment Walls	Mile	\$	5,907,456			0.00	\$ -	
19 Single Track Cut and Cover Subway	Mile	\$	131,246,080				\$ -	
Four Track Drill & Blast	Mile	\$	293,775,360				\$ -	
Four Track Mined (Soft Soil)	Mile	\$	158,400,000				\$ -	
Four Track TBM (<6 Miles)	Mile	\$	213,274,624					
Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792					
Four Track Cut & Cover Tunnel	Mile	\$	262,492,160			0.00	\$ -	
Grade Separations								
1 Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352				\$ -	
Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528			0	\$ -	
2 Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680				\$ -	
3 Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568				\$ -	
4 Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520				\$ -	
5 Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216				\$ -	
Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816				\$ -	
6 Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328				\$ -	
7 Street Bridging HSR Trench	ea	\$	1,398,784				\$ -	
8 Minor Crossing Closures	ea	\$	87,040				\$ -	
Building Items								

COST ELEMENTS			UNIT	UNIT PRICE	Berm			
Subsection 4			Base: 2009 (3rd Quarter)	A				
				Start: 1164 + 00	End: 1200 + 00	0.68 Miles		
Subsection Details						Quant.	Cost	
Double Track At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles		
Double Track Elevated (Mile)				Start: 0 + 00		0.00 Miles		
Double Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles		
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 1164 + 00	End: 1182 + 00	0.34 Miles		
Four Track Elevated (Mile)				Start: 1182 + 00	End: 1200 + 00	0.34 Miles		
Four Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		
Four Track Trench (Mile)				Start: 0 + 00		0.00 Miles		
1 Intermediate Passenger Stations	Each	\$	-				\$ -	
2 Terminal Passenger Stations	Each	\$	-				\$ -	
Caltrain Passenger Station - At-Grade	Each	\$	15,000,000				\$ -	
Caltrain Passenger Station - On Structure	Each	\$	15,000,000				\$ -	
Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000				\$ -	
Caltrain Passenger Station - In Trench	Each	\$	15,000,000				\$ -	
3 Maintenance Facility	Each	\$	123,921,884				\$ -	
4 Parking - Structures	space	\$	-				\$ -	
5 Parking - At Grade	space	\$	-				\$ -	
Rail & Utility Relocation								
1 Single Track Relocation (Temporary)	Mile	\$	2,000,896				\$ -	
2 Single Track Relocation (Permanent)	Mile	\$	2,000,896				\$ -	
3 Single Track Removal	Mile	\$	130,048				\$ -	
4 Major Utility Relocations - Dense Urban	Mile	\$	1,548,288				\$ -	
5 Major Utility Relocations - Urban	Mile	\$	1,084,416				\$ -	
6 Major Utility Relocations - Dense Suburban	Mile	\$	775,168				\$ -	
7 Major Utility Relocations - Suburban	Mile	\$	464,896				\$ -	
8 Major Utility Relocations - Undeveloped	Mile	\$	30,720				\$ -	
ROW (Not Included)								
ROW required for each segment								
1 Dense Urban	Acre	\$	2,786,321				\$ -	
2 Urban	Acre	\$	1,371,510				\$ -	
3 Dense Suburban	Acre	\$	908,134				\$ -	
4 Suburban	Acre	\$	208,418				\$ -	
5 Undeveloped	Acre	\$	3,642				\$ -	
ROW required for Temp. Construction Easement							\$ -	
1 Dense Urban	Acre						\$ -	
2 Urban	Acre						\$ -	
3 Dense Suburban	Acre						\$ -	
4 Suburban	Acre						\$ -	
5 Undeveloped	Acre						\$ -	
Right-of-Way Required for Stations, Maintenance & Parking Facilities								
6 Dense Urban	Acre	\$	2,786,321				\$ -	
7 Urban	Acre	\$	1,371,510				\$ -	
8 Dense Suburban	Acre	\$	908,134				\$ -	
9 Suburban	Acre	\$	208,418				\$ -	
10 Undeveloped	Acre	\$	3,642				\$ -	
Environmental Mitigation = 3% Line Costs							\$ 674,003	
System Elements								
1 Signaling (ATC)	Mile	\$	2,070,000			0.68 Miles	\$ 1,411,364	
2 Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			0.68 Miles	\$ 368,182	
3 Wayside Protection System	Mile	\$	108,000			0.68 Miles	\$ 73,636	
Electrification Items								
1 Traction Power supply	Mile	\$	1,170,000			0.68 Miles	\$ 797,727	
2 Traction Power Distribution	Mile	\$	1,485,000			0.68 Miles	\$ 1,012,500	
Subtotal							\$ 26,804,187	
Program Implementation Costs (per screening)							\$ 6,835,068	
Program Implementation Costs								
Contingencies (per screening) (25%)							\$ 6,701,047	
Subtotal							\$ 40,340,301	
Subtotal (Rounded)							\$ 40,000,000	

COST ELEMENTS		UNIT	UNIT PRICE	Berm				Aerial Viaduct				At-Grade (2 tracks)				At-Grade (4 tracks)			
Subsection 4			Base: 2009 (3rd Quarter)	B1				B2				B2				B2			
				Start: 1200 + 00	Start: 1270 + 00	1.33 Miles		Start: 1270 + 00	Start: 1450 + 00	3.41 Miles		Start: 1270 + 00	End: 1450 + 00	3.41 Miles		Start: 1270 + 00	End: 1450 + 00	3.41 Miles	
						Quant.	Cost			Quant.	Cost			Quant.	Cost			Quant.	Cost
Subsection Details				Start: 0 + 00	Start: 0 + 00	0.00 Miles		Start: 0 + 00	Start: 0 + 00	0.00 Miles		Start: 1270 + 00	End: 1450 + 00	3.41 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track At-Grade (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Elevated (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 1200 + 00	End: 1235 + 00	0.66 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Elevated (Mile)				Start: 1235 + 00	End: 1270 + 00	0.66 Miles		Start: 1270 + 00	End: 1450 + 00	3.41 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1270 + 00	End: 1450 + 00	3.41 Miles	
Four Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00	0.00 Miles	0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Section - Total																			
1 Double Track Section - At Grade	Mile	\$	2,100,224			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
2 Double Track Section - On Structure	Mile	\$	4,700,160			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
3 Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
4 Double Track Section - In Trench	Mile	\$	4,700,160			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
Four Track Section - Total																			
Four-track Section - At Grade	Mile	\$	4,200,448			0.66	\$ 2,784,388			0.00	\$ -			0.00	\$ -			0.00	\$ -
Four-Track Section - On Structure	Mile	\$	9,400,320			0.66	\$ 6,231,273			3.41	\$ 32,046,545			0.00	\$ -			3.41	\$ 32,046,545
Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
Four-Track Section - In Trench	Mile	\$	9,400,320			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
Single Track - Total																			
5 Single Track Section - At Grade	Mile	\$	1,549,312			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
6 Single Track Section - On structure	Mile	\$	2,350,080			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
7 Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
8 Single Track Section - In Trench	Mile	\$	2,350,080			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
9 Freight Double Track - At Grade	Mile	\$	2,839,552			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
10 Freight Single Track - At Grade	Mile	\$	1,549,312			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
Earthwork Items																			
1 Site Preparation - Undeveloped	Acre	\$	9,216			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
2 Total Cut	CY	\$	6.00			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
3 Total Fill	CY	\$	6.00			259259.26	\$ 1,555,556			0.00	\$ -			0.00	\$ -			0.00	\$ -
4 Borrow	CY	\$	13.00			259259.26	\$ 3,370,370			0.00	\$ -			0.00	\$ -			0.00	\$ -
5 Spoil	CY	\$	13.00			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
6 Landscape erosion Control	Acre	\$	6,144			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
7 Security Fencing (Both sides of ROW)	Mile	\$	144,384			0.66	\$ 95,709			0.00	\$ -			0.00	\$ -			0.00	\$ -
8 Special Drainage Facilities	5% Earthwork						\$ 251,082				\$ -				\$ -				\$ -
Structures, Tunnels, Walls																			
1 Standard Structure	Mile	\$	34,972,672			0.66	\$ 23,182,642			3.41	\$ 119,225,018			0.00	\$ -			\$ -	\$ -
2 High Structure	Mile	\$	40,424,448				\$ -				\$ -				\$ -			\$ -	\$ -
3 Long Span Structure	Mile	\$	61,919,232				\$ -				\$ -				\$ -			\$ -	\$ -
4 Waterway Crossing - Primary	Mile	\$	85,342,208				\$ -				\$ -				\$ -			\$ -	\$ -
5 Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408				\$ -				\$ -				\$ -			\$ -	\$ -
6 Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264				\$ -				\$ -				\$ -			\$ -	\$ -
7 Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312				\$ -				\$ -				\$ -			\$ -	\$ -
8 Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896				\$ -				\$ -				\$ -			\$ -	\$ -
9 Double Track Drill & Blast	Mile	\$	146,887,680			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
10 Double Track Mined (Soft Soil)	Mile	\$	792,000,000				\$ -				\$ -				\$ -			\$ -	\$ -
Double Track TBM (<6 Miles)	Mile	\$	106,637,312				\$ -				\$ -				\$ -			\$ -	\$ -
Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896				\$ -				\$ -				\$ -			\$ -	\$ -
11 Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952				\$ -				\$ -				\$ -			\$ -	\$ -
12 Crossovers	ea	\$	442,368				\$ -				\$ -				\$ -			\$ -	\$ -
13 Cut & Cover Double Track Tunnel	Mile	\$	131,246,080			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
14 Trench Short	Mile	\$	78,843,904			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
15 Trench Long	Mile	\$	57,524,224				\$ -				\$ -				\$ -			\$ -	\$ -
16 Mechanical & Electrical for Tunnels	Mile	\$	11,848,704				\$ -				\$ -				\$ -			\$ -	\$ -
17 Retaining Walls	Mile	\$	8,613,888			0.66	\$ 5,709,964			0.00	\$ -			0.00	\$ -			0.00	\$ -
18 Containment Walls	Mile	\$	5,907,456			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
19 Single Track Cut and Cover Subway	Mile	\$	131,246,080				\$ -				\$ -				\$ -			\$ -	\$ -
Four Track Drill & Blast	Mile	\$	293,775,360				\$ -				\$ -				\$ -			\$ -	\$ -
Four Track Mined (Soft Soil)	Mile	\$	1,584,000,000				\$ -				\$ -				\$ -			\$ -	\$ -
Four Track TBM (<6 Miles)	Mile	\$	213,274,624				\$ -				\$ -				\$ -			\$ -	\$ -
Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792				\$ -				\$ -				\$ -			\$ -	\$ -
Four Track Cut & Cover Tunnel	Mile	\$	262,492,160			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
Grade Separations																			
1 Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352				\$ -				\$ -				\$ -			\$ -	\$ -
Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528			0	\$ -			0	\$ -			0	\$ -			0	\$ -
2 Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680			1	\$ 2,759,680			4	\$ 11,038,720				\$ -			\$ -	\$ -
3 Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568				\$ -				\$ -				\$ -			\$ -	\$ -
4 Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520				\$ -				\$ -				\$ -			\$ -	\$ -
5 Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216				\$ -				\$ -				\$ -			\$ -	\$ -
Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816				\$ -				\$ -				\$ -			\$ -	\$ -
6 Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328				\$ -				\$ -				\$ -			\$ -	\$ -
7 Street Bridging HSR Trench	ea	\$	1,398,784				\$ -				\$ -				\$ -			\$ -	\$ -
8 Minor Crossing Closures	ea	\$	87,040				\$ -				\$ -				\$ -			\$ -	\$ -

COST ELEMENTS			UNIT	UNIT PRICE	Berm		Aerial Viaduct				At-Grade (2 tracks)				At-Grade (4 tracks)							
Subsection 4			Base: 2009 (3rd Quarter)		B1		B2				B2				B2							
					Start: 1200 + 00	Start: 1270 + 00	1.33 Miles		Start: 1270 + 00	Start: 1450 + 00	3.41 Miles		Start: 1270 + 00	End: 1450 + 00	3.41 Miles		Start: 1270 + 00	End: 1450 + 00	3.41 Miles			
					Quant.	Cost			Quant.	Cost			Quant.	Cost			Quant.	Cost				
Subsection Details																						
Double Track At-Grade (Mile)					Start: 0 + 00	Start: 0 + 00	0.00 Miles		Start: 0 + 00	Start: 0 + 00	0.00 Miles		Start: 1270 + 00	End: 1450 + 00	3.41 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 1200 + 00	End: 1235 + 00	0.66 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Elevated (Mile)					Start: 1235 + 00	End: 1270 + 00	0.66 Miles		Start: 1270 + 00	End: 1450 + 00	3.41 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1270 + 00	End: 1450 + 00	3.41 Miles			
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00	0.00 Miles	0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Building Items																						
1 Intermediate Passenger Stations	Each	\$	-				\$	-			\$	-			\$	-			\$	-		
2 Terminal Passenger Stations	Each	\$	-				\$	-			\$	-			\$	-			\$	-		
Caltrain Passenger Station - At-Grade	Each	\$	15,000,000				\$	-			\$	-			\$	-			\$	-		
Caltrain Passenger Station - On Structure	Each	\$	15,000,000			1	\$	15,000,000			2	\$	30,000,000			\$	-		2	\$	30,000,000	
2 Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000				\$	-			\$	-			\$	-			\$	-		
Caltrain Passenger Station - In Trench	Each	\$	15,000,000				\$	-			\$	-			\$	-			\$	-		
3 Maintenance Facility	Each	\$	123,921,884				\$	-			\$	-			\$	-			\$	-		
4 Parking - Structures	space	\$	-				\$	-			\$	-			\$	-			\$	-		
5 Parking - At Grade	space	\$	-				\$	-			\$	-			\$	-			\$	-		
Rail & Utility Relocation																						
1 Single Track Relocation (Temporary)	Mile	\$	2,000,896				\$	-			\$	-			\$	-			\$	-		
2 Single Track Relocation (Permanent)	Mile	\$	2,000,896				\$	-			\$	-			\$	-			\$	-		
3 Single Track Removal	Mile	\$	130,048				\$	-			\$	-			\$	-			\$	-		
4 Major Utility Relocations - Dense Urban	Mile	\$	1,548,288				\$	-			\$	-			\$	-			\$	-		
5 Major Utility Relocations - Urban	Mile	\$	1,084,416				\$	-			\$	-			\$	-			\$	-		
6 Major Utility Relocations - Dense Suburban	Mile	\$	775,168				\$	-			\$	-			\$	-			\$	-		
7 Major Utility Relocations - Suburban	Mile	\$	464,896				\$	-			\$	-			\$	-			\$	-		
8 Major Utility Relocations - Undeveloped	Mile	\$	30,720				\$	-			\$	-			\$	-			\$	-		
ROW (Not Included)																						
ROW required for each segment																						
1 Dense Urban	Acre	\$	2,786,321				\$	-			\$	-			\$	-			\$	-		
2 Urban	Acre	\$	1,371,510				\$	-			\$	-			\$	-			\$	-		
3 Dense Suburban	Acre	\$	908,134				\$	-			\$	-			\$	-			\$	-		
4 Suburban	Acre	\$	208,418				\$	-			\$	-			\$	-			\$	-		
5 Undeveloped	Acre	\$	3,642				\$	-			\$	-			\$	-			\$	-		
ROW required for Temp. Construction Easement							\$	-			\$	-			\$	-			\$	-		
1 Dense Urban	Acre						\$	-			B				B				B			
2 Urban	Acre						\$	-			\$	-			\$	-			\$	-		
3 Dense Suburban	Acre						\$	-			\$	-			\$	-			\$	-		
4 Suburban	Acre						\$	-			\$	-			\$	-			\$	-		
5 Undeveloped	Acre						\$	-			\$	-			\$	-			\$	-		
Right-of-Way Required for Stations, Maintenance & Parking Facilities																						
6 Dense Urban	Acre	\$	2,786,321				\$	-			\$	-			\$	-			\$	-		
7 Urban	Acre	\$	1,371,510				\$	-			\$	-			\$	-			\$	-		
8 Dense Suburban	Acre	\$	908,134				\$	-			\$	-			\$	-			\$	-		
9 Suburban	Acre	\$	208,418				\$	-			\$	-			\$	-			\$	-		
10 Undeveloped	Acre	\$	3,642				\$	-			\$	-			\$	-			\$	-		
Environmental Mitigation = 3% Line Costs							\$	1,828,220				\$	5,769,309				\$	-		\$	1,861,396	
System Elements																						
1 Signaling (ATC)	Mile	\$	2,070,000			1.33	\$	2,744,318			3.41	\$	7,056,818			3.41	\$	7,056,818		3.41	\$	7,056,818
2 Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			1.33	\$	715,909			3.41	\$	1,840,909			3.41	\$	1,840,909		3.41	\$	1,840,909
3 Wayside Protection System	Mile	\$	108,000			1.33	\$	143,182			3.41	\$	368,182			3.41	\$	368,182		3.41	\$	368,182
Electrification Items																						
1 Traction Power supply	Mile	\$	1,170,000			1.33	\$	1,551,136			3.41	\$	3,988,636			3.41	\$	3,988,636		3.41	\$	3,988,636
2 Traction Power Distribution	Mile	\$	1,485,000			1.33	\$	1,968,750			3.41	\$	5,062,500			3.41	\$	5,062,500		3.41	\$	5,062,500
Subtotal							\$	69,892,179				\$	216,396,638				\$	18,317,045			\$	82,224,987
Program Implementation Costs (per screening)							\$	17,822,506				\$	55,181,143				\$	4,670,847			\$	20,967,372
Program Implementation Costs																						
Contingencies (per screening) (25%)							\$	17,473,045				\$	54,099,159				\$	4,579,261			\$	20,556,247
Subtotal							\$	105,187,729				\$	325,676,940				\$	27,567,153			\$	123,748,606
Subtotal (Rounded)							\$	105,000,000				\$	326,000,000				\$	28,000,000			\$	124,000,000

COST ELEMENTS		UNIT	UNIT PRICE	Open Trench				Covered Trench				Tunnel (HST only)			
Subsection 4			Base: 2009 (3rd Quarter)	B2				B2				B2			
				Start: 1270 + 00	Start: 1450 + 00	3.41 Miles		Start: 1270 + 00	Start: 1450 + 00	3.41 Miles		Start: 1270 + 00	Start: 1450 + 00	3.41 Miles	
Subsection Details						Quant.	Cost			Quant.	Cost			Quant.	Cost
Double Track At-Grade (Mile)				Start: 0 + 00	Start: 0 + 00	0.00 Miles		Start: 0 + 00	Start: 0 + 00	0.00 Miles		Start: 0 + 00	Start: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1270 + 00	End: 1450 + 00	3.41 Miles	
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Elevated (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 1270 + 00	End: 1450 + 00	3.41 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Trench (Mile)				Start: 1270 + 00	End: 1450 + 00	3.41 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Section - Total															
1 Double Track Section - At Grade	Mile	\$	2,100,224			0.00	\$ -			0.00	\$ -			0.00	\$ -
2 Double Track Section - On Structure	Mile	\$	4,700,160			0.00	\$ -			0.00	\$ -			0.00	\$ -
3 Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160			0.00	\$ -			0.00	\$ -			3.41	\$ 16,023,273
4 Double Track Section - In Trench	Mile	\$	4,700,160			0.00	\$ -			0.00	\$ -			0.00	\$ -
Four Track Section - Total															
Four-track Section - At Grade	Mile	\$	4,200,448			0.00	\$ -			0.00	\$ -			0.00	\$ -
Four-Track Section - On Structure	Mile	\$	9,400,320			0	\$ -			0.00	\$ -			0.00	\$ -
Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320			0	\$ -			3.41	\$ 32,046,545				
Four-Track Section - In Trench	Mile	\$	9,400,320			3.41	\$ 32,046,545			0	\$ -			0	\$ -
Single Track - Total															
5 Single Track Section - At Grade	Mile	\$	1,549,312			0	\$ -			0	\$ -			0	\$ -
6 Single Track Section - On structure	Mile	\$	2,350,080			0	\$ -			0	\$ -			0	\$ -
7 Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080			0	\$ -			0	\$ -			0	\$ -
8 Single Track Section - In Trench	Mile	\$	2,350,080			0	\$ -			0	\$ -			0	\$ -
9 Freight Double Track - At Grade	Mile	\$	2,839,552			0	\$ -			0	\$ -			0	\$ -
10 Freight Single Track - At Grade	Mile	\$	1,549,312			0	\$ -			0	\$ -			0	\$ -
Earthwork Items															
1 Site Preparation - Undeveloped	Acre	\$	9,216			45.45	\$ 418,909			45.45	\$ 418,909			0.00	\$ -
2 Total Cut	CY	\$	6.00			1466666.67	\$ 8,800,000			1466666.67	\$ 8,800,000			0.00	\$ -
3 Total Fill	CY	\$	6.00			0.00	\$ -				\$ -			0.00	\$ -
4 Borrow	CY	\$	13.00			0.00	\$ -			0.00	\$ -			0.00	\$ -
5 Spoil	CY	\$	13.00			1466666.67	\$ 19,066,667			1466666.67	\$ 19,066,667			0.00	\$ -
6 Landscape erosion Control	Acre	\$	6,144			45.45	\$ 279,273			45.45	\$ 279,273			0.00	\$ -
7 Security Fencing (Both sides of ROW)	Mile	\$	144,384			3.41	\$ 492,218			0.00	\$ -			0.00	\$ -
8 Special Drainage Facilities	5% Earthwork						\$ 1,452,853				\$ 1,428,242			\$	\$ -
Structures, Tunnels, Walls															
1 Standard Structure	Mile	\$	34,972,672			0.00	\$ -			0.00	\$ -			0.00	\$ -
2 High Structure	Mile	\$	40,424,448				\$ -				\$ -				\$ -
3 Long Span Structure	Mile	\$	61,919,232				\$ -				\$ -				\$ -
4 Waterway Crossing - Primary	Mile	\$	85,342,208				\$ -				\$ -				\$ -
5 Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408				\$ -				\$ -				\$ -
6 Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264				\$ -				\$ -				\$ -
7 Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312				\$ -				\$ -				\$ -
8 Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896				\$ -				\$ -				\$ -
9 Double Track Drill & Blast	Mile	\$	146,887,680			0.00	\$ -			0.00	\$ -			0.00	\$ -
10 Double Track Mined (Soft Soil)	Mile	\$	792,000,000				\$ -				\$ -			0.76	\$ 601,200,000
Double Track TBM (<6 Miles)	Mile	\$	106,637,312											2.65	\$ 282,588,877
Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896												
11 Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952				\$ -				\$ -				\$ -
12 Crossovers	ea	\$	442,368				\$ -				\$ -				\$ -
13 Cut & Cover Double Track Tunnel	Mile	\$	131,246,080			0.00	\$ -			0.00	\$ -			0.00	\$ -
14 Trench Short	Mile	\$	78,843,904			3.41	\$ 268,786,036			0.00	\$ -			0.00	\$ -
15 Trench Long	Mile	\$	57,524,224				\$ -				\$ -				\$ -
16 Mechanical & Electrical for Tunnels	Mile	\$	11,848,704				\$ -			3.41	\$ 40,393,309			3.41	\$ 40,393,309
17 Retaining Walls	Mile	\$	8,613,888			3.41	\$ 29,365,527			0.00	\$ -			0.00	\$ -
18 Containment Walls	Mile	\$	5,907,456			3.41	\$ 20,139,055			0.00	\$ -			0.00	\$ -
19 Single Track Cut and Cover Subway	Mile	\$	131,246,080				\$ -				\$ -				\$ -
Four Track Drill & Blast	Mile	\$	293,775,360				\$ -				\$ -				\$ -
Four Track Mined (Soft Soil)	Mile	\$	1,584,000,000				\$ -				\$ -				\$ -
Four Track TBM (<6 Miles)	Mile	\$	213,274,624											0.00	\$ -
Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792												\$ -
Four Track Cut & Cover Tunnel	Mile	\$	262,492,160			0.00	\$ -			3.41	\$ 894,859,636			0.00	\$ -
Grade Separations															
1 Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352				\$ -				\$ -				\$ -
Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528				\$ -				\$ -				\$ -
2 Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680			4	\$ 11,038,720			4	\$ 11,038,720			4	\$ 11,038,720
3 Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568				\$ -				\$ -				\$ -
4 Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520				\$ -				\$ -				\$ -
5 Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216				\$ -				\$ -				\$ -
Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816				\$ -				\$ -				\$ -
6 Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328				\$ -				\$ -				\$ -
7 Street Bridging HSR Trench	ea	\$	1,398,784			0	\$ -			0	\$ -			0	\$ -
8 Minor Crossing Closures	ea	\$	87,040				\$ -			0	\$ -			0	\$ -

COST ELEMENTS			UNIT	UNIT PRICE	Open Trench				Covered Trench				Tunnel (HST only)				
Subsection 4			Base: 2009 (3rd Quarter)	B2				B2				B2					
				Start: 1270 + 00	Start: 1450 + 00	3.41 Miles		Start: 1270 + 00	Start: 1450 + 00	3.41 Miles		Start: 1270 + 00	Start: 1450 + 00	3.41 Miles			
Subsection Details						Quant.	Cost			Quant.	Cost			Quant.	Cost		
Double Track At-Grade (Mile)				Start: 0 + 00	Start: 0 + 00	0.00 Miles		Start: 0 + 00	Start: 0 + 00	0.00 Miles		Start: 0 + 00	Start: 0 + 00	0.00 Miles			
Double Track Elevated (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Double Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1270 + 00	End: 1450 + 00	3.41 Miles			
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Elevated (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 1270 + 00	End: 1450 + 00	3.41 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Trench (Mile)				Start: 1270 + 00	End: 1450 + 00	3.41 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
1 Building Items			Each	\$	-					\$	-			\$	-		
2 Terminal Passenger Stations			Each	\$	-					\$	-			\$	-		
Caltrain Passenger Station - At-Grade			Each	\$	15,000,000					\$	-			\$	-		
Caltrain Passenger Station - On Structure			Each	\$	15,000,000					\$	-			\$	-		
2 Caltrain Passenger Station - In Tunnel or Subway			Each	\$	15,000,000					\$	-		0	\$	-		
Caltrain Passenger Station - In Trench			Each	\$	15,000,000	2	30,000,000			2	30,000,000		0	\$	-		
3 Maintenance Facility			Each	\$	123,921,884					\$	-			\$	-		
4 Parking - Structures			space	\$	-					\$	-			\$	-		
5 Parking - At Grade			space	\$	-					\$	-			\$	-		
Rail & Utility Relocation																	
1 Single Track Relocation (Temporary)			Mile	\$	2,000,896					\$	-			\$	-		
2 Single Track Relocation (Permanent)			Mile	\$	2,000,896					\$	-			\$	-		
3 Single Track Removal			Mile	\$	130,048					\$	-			\$	-		
4 Major Utility Relocations - Dense Urban			Mile	\$	1,548,288					\$	-			\$	-		
5 Major Utility Relocations - Urban			Mile	\$	1,084,416					\$	-			\$	-		
6 Major Utility Relocations - Dense Suburban			Mile	\$	775,168					\$	-			\$	-		
7 Major Utility Relocations - Suburban			Mile	\$	464,896					\$	-			\$	-		
8 Major Utility Relocations - Undeveloped			Mile	\$	30,720					\$	-			\$	-		
ROW (Not Included)																	
ROW required for each segment																	
1 Dense Urban			Acre	\$	2,786,321					\$	-			\$	-		
2 Urban			Acre	\$	1,371,510					\$	-			\$	-		
3 Dense Suburban			Acre	\$	908,134					\$	-			\$	-		
4 Suburban			Acre	\$	208,418					\$	-			\$	-		
5 Undeveloped			Acre	\$	3,642					\$	-			\$	-		
ROW required for Temp. Construction Easement										\$	-			\$	-		
1 Dense Urban			Acre							\$	-			\$	-		
2 Urban			Acre							\$	-			\$	-		
3 Dense Suburban			Acre							\$	-			\$	-		
4 Suburban			Acre							\$	-			\$	-		
5 Undeveloped			Acre							\$	-			\$	-		
Right-of-Way Required for Stations, Maintenance & Parking Facilities																	
6 Dense Urban			Acre	\$	2,786,321					\$	-			\$	-		
7 Urban			Acre	\$	1,371,510					\$	-			\$	-		
8 Dense Suburban			Acre	\$	908,134					\$	-			\$	-		
9 Suburban			Acre	\$	208,418					\$	-			\$	-		
10 Undeveloped			Acre	\$	3,642					\$	-			\$	-		
Environmental Mitigation = 3% Line Costs							\$	12,656,574			\$	31,149,939			\$	28,537,325	
System Elements																	
1 Signaling (ATC)			Mile	\$	2,070,000		3.41	\$	7,056,818		3.41	\$	7,056,818		3.41	\$	7,056,818
2 Communications (w/ Fiber Optic Backbone)			Mile	\$	540,000		3.41	\$	1,840,909		3.41	\$	1,840,909		3.41	\$	1,840,909
3 Wayside Protection System			Mile	\$	108,000		3.41	\$	368,182		3.41	\$	368,182		3.41	\$	368,182
Electrification Items																	
1 Traction Power supply			Mile	\$	1,170,000		3.41	\$	3,988,636		3.41	\$	3,988,636		3.41	\$	3,988,636
2 Traction Power Distribution			Mile	\$	1,485,000		3.41	\$	5,062,500		3.41	\$	5,062,500		3.41	\$	5,062,500
Program Implementation Costs (per screening)								\$	452,859,423			\$	1,087,798,286			\$	998,098,549
Program Implementation Costs								\$	115,479,153			\$	277,388,563			\$	254,515,130
Contingencies (per screening) (25%)								\$	113,214,856			\$	271,949,572			\$	249,524,637
Subtotal								\$	681,553,432			\$	1,637,136,421			\$	1,502,138,317
Subtotal (Rounded)								\$	682,000,000			\$	1,637,000,000			\$	1,502,000,000

COST ELEMENTS		UNIT	UNIT PRICE	Aerial Viaduct (4 Tracks)				Aerial Viaduct (2 Tracks)				Open Trench				Covered Trench			
Subsection 4			Base: 2009 (3rd Quarter)	C				C				C				C			
				Start: 1450 + 00	Start: 1533 + 00	1.57 Miles		Start: 1450 + 00	Start: 1533 + 00	1.57 Miles		Start: 1450 + 00	Start: 1533 + 00	1.57 Miles		Start: 1450 + 00	Start: 1533 + 00	1.57 Miles	
						Quant.	Cost			Quant.	Cost			Quant.	Cost			Quant.	Cost
Subsection Details																			
Double Track At-Grade (Mile)				Start: 0 + 00	Start: 0 + 00	0.00 Miles		Start: 0 + 00	Start: 0 + 00	0.00 Miles		Start: 0 + 00	Start: 0 + 00	0.00 Miles		Start: 0 + 00	Start: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)				Start: 0 + 00		0.00 Miles		Start: 1450 + 00	End: 1533 + 00	1.57 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Elevated (Mile)				Start: 1450 + 00	End: 1533 + 00	1.57 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1450 + 00	End: 1533 + 00	1.57 Miles	
Four Track Trench (Mile)				Start: 0 + 00	0.00 Miles	0.00 Miles		Start: 0 + 00	0.00 Miles	0.00 Miles		Start: 1450 + 00	End: 1533 + 00	1.57 Miles		Start: 0 + 00		0.00 Miles	
Double Track Section - Total																			
1 Double Track Section - At Grade	Mile	\$	2,100,224			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
2 Double Track Section - On Structure	Mile	\$	4,700,160			0.00	\$ -			1.57	7,388,509			0.00	\$ -			0.00	\$ -
3 Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
4 Double Track Section - In Trench	Mile	\$	4,700,160			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
Four Track Section - Total																			
Four-track Section - At Grade	Mile	\$	4,200,448			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
Four-Track Section - On Structure	Mile	\$	9,400,320			1.57	14,777,018			0.00	\$ -			0	\$ -			0	\$ -
Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320			0.00	\$ -			0.00	\$ -			0	\$ -			1.57	14,777,018
Four-Track Section - In Trench	Mile	\$	9,400,320			0.00	\$ -			0.00	\$ -			1.57	14,777,018			0	\$ -
Single Track - Total																			
5 Single Track Section - At Grade	Mile	\$	1,549,312			0.00	\$ -			0.00	\$ -			0	\$ -			0	\$ -
6 Single Track Section - On structure	Mile	\$	2,350,080			0.00	\$ -			0.00	\$ -			0	\$ -			0	\$ -
7 Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080			0.00	\$ -			0.00	\$ -			0	\$ -			0	\$ -
8 Single Track Section - In Trench	Mile	\$	2,350,080			0.00	\$ -			0.00	\$ -			0	\$ -			0	\$ -
9 Freight Double Track - At Grade	Mile	\$	2,839,552			0.00	\$ -			0.00	\$ -			0	\$ -			0	\$ -
10 Freight Single Track - At Grade	Mile	\$	1,549,312			0.00	\$ -			0.00	\$ -			0	\$ -			0	\$ -
Earthwork Items																			
1 Site Preparation - Undeveloped	Acre	\$	9,216			0.00	\$ -			0.00	\$ -			20.96	193,164			20.96	193,164
2 Total Cut	CY	\$	6.00			0.00	\$ -			0.00	\$ -			676296.30	4,057,778			676296.30	4,057,778
3 Total Fill	CY	\$	6.00			0.00	\$ -			0.00	\$ -			0.00	\$ -			\$	-
4 Borrow	CY	\$	13.00			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
5 Spoil	CY	\$	13.00			0.00	\$ -			0.00	\$ -			676296.30	8,791,852			676296.30	8,791,852
6 Landscape erosion Control	Acre	\$	6,144			0.00	\$ -			0.00	\$ -			20.96	128,776			20.96	128,776
7 Security Fencing (Both sides of ROW)	Mile	\$	144,384			0.00	\$ -			0.00	\$ -			1.57	226,967			0.00	\$ -
8 Special Drainage Facilities	5% Earthwork					\$	-			\$	-			\$	669,927			\$	658,578
Structures, Tunnels, Walls																			
1 Standard Structure (assume cost for 2 track is 60% of unit cost)	Mile	\$	34,972,672			1.57	54,975,981			1.57	32,985,588			0.00	\$ -			0.00	\$ -
2 High Structure	Mile	\$	40,424,448			\$	-			\$	-			\$	-			\$	-
3 Long Span Structure	Mile	\$	61,919,232			\$	-			\$	-			\$	-			\$	-
4 Waterway Crossing - Primary	Mile	\$	85,342,208			\$	-			\$	-			\$	-			\$	-
5 Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408			\$	-			\$	-			\$	-			\$	-
6 Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264			\$	-			\$	-			\$	-			\$	-
7 Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312			\$	-			\$	-			\$	-			\$	-
8 Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896			\$	-			\$	-			\$	-			\$	-
9 Double Track Drill & Blast	Mile	\$	146,887,680			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
10 Double Track Mined (Soft Soil)	Mile	\$	79,200,000			\$	-			\$	-			\$	-			\$	-
Double Track TBM (<6 Miles)	Mile	\$	106,637,312																
Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896																
11 Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952			\$	-			\$	-			\$	-			\$	-
12 Crossovers	ea	\$	442,368			\$	-			\$	-			\$	-			\$	-
13 Cut & Cover Double Track Tunnel	Mile	\$	131,246,080			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
14 Trench Short	Mile	\$	78,843,904			0.00	\$ -			0.00	\$ -			1.57	123,940,228			0.00	\$ -
15 Trench Long	Mile	\$	57,524,224			\$	-			\$	-			\$	-			\$	-
16 Mechanical & Electrical for Tunnels	Mile	\$	11,848,704			\$	-			\$	-			\$	-			1.57	18,625,804
17 Retaining Walls	Mile	\$	8,613,888			0.00	\$ -			0.00	\$ -			1.57	13,540,771			0.00	\$ -
18 Containment Walls	Mile	\$	5,907,456			0.00	\$ -			0.00	\$ -			1.57	9,286,342			0.00	\$ -
19 Single Track Cut and Cover Subway	Mile	\$	131,246,080			\$	-			\$	-			\$	-			\$	-
Four Track Drill & Blast	Mile	\$	293,775,360			\$	-			\$	-			\$	-			\$	-
Four Track Mined (Soft Soil)	Mile	\$	158,400,000			\$	-			\$	-			\$	-			\$	-
Four Track TBM (<6 Miles)	Mile	\$	213,274,624																
Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792																
Four Track Cut & Cover Tunnel	Mile	\$	262,492,160			0.00	\$ -			0.00	\$ -			0.00	\$ -			1.57	412,629,721
Grade Separations																			
1 Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352			\$	-			\$	-			\$	-			\$	-
Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528			0	\$ -			0	\$ -			\$	-			\$	-
2 Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680			3	8,279,040			3	8,279,040			0	\$ -			0	\$ -
3 Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568			\$	-			\$	-			\$	-			\$	-
4 Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520			\$	-			\$	-			3	10,690,560			3	10,690,560
5 Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216			\$	-			\$	-			\$	-			\$	-
Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816			\$	-			\$	-			\$	-			\$	-
6 Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328			\$	-			\$	-			\$	-			\$	-
7 Street Bridging HSR Trench	ea	\$	1,398,784			\$	-			\$	-			0	\$ -			0	\$ -
8 Minor Crossing Closures	ea	\$	87,040			\$	-			\$	-			\$	-			0	\$ -

COST ELEMENTS		UNIT	UNIT PRICE	Aerial Viaduct (4 Tracks)				Aerial Viaduct (2 Tracks)				Open Trench				Covered Trench			
Subsection 4			Base: 2009 (3rd Quarter)	C				C				C				C			
				Start: 1450 + 00	Start: 1533 + 00	1.57 Miles		Start: 1450 + 00	Start: 1533 + 00	1.57 Miles		Start: 1450 + 00	Start: 1533 + 00	1.57 Miles		Start: 1450 + 00	Start: 1533 + 00	1.57 Miles	
						Quant.	Cost			Quant.	Cost			Quant.	Cost			Quant.	Cost
Subsection Details				Start: 0 + 00	Start: 0 + 00	0.00 Miles		Start: 0 + 00	Start: 0 + 00	0.00 Miles		Start: 0 + 00	Start: 0 + 00	0.00 Miles		Start: 0 + 00	Start: 0 + 00	0.00 Miles	
Double Track At-Grade (Mile)				Start: 0 + 00		0.00 Miles		Start: 1450 + 00	End: 1533 + 00	1.57 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Elevated (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Elevated (Mile)				Start: 1450 + 00	End: 1533 + 00	1.57 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1450 + 00	End: 1533 + 00	1.57 Miles	
Four Track Trench (Mile)				Start: 0 + 00	0.00 Miles	0.00 Miles		Start: 0 + 00	0.00 Miles	0.00 Miles		Start: 1450 + 00	End: 1533 + 00	1.57 Miles		Start: 0 + 00		0.00 Miles	
Building Items																			
1 Intermediate Passenger Stations			Each																
2 Terminal Passenger Stations			Each																
Caltrain Passenger Station - At-Grade			Each				1				1				1				1
Caltrain Passenger Station - On Structure			Each																
Caltrain Passenger Station - In Tunnel or Subway			Each																
Caltrain Passenger Station - In Trench			Each																
3 Maintenance Facility			Each																
4 Parking - Structures			space																
5 Parking - At Grade			space																
Rail & Utility Relocation																			
1 Single Track Relocation (Temporary)			Mile																
2 Single Track Relocation (Permanent)			Mile																
3 Single Track Removal			Mile																
4 Major Utility Relocations - Dense Urban			Mile																
5 Major Utility Relocations - Urban			Mile																
6 Major Utility Relocations - Dense Suburban			Mile																
7 Major Utility Relocations - Suburban			Mile																
8 Major Utility Relocations - Undeveloped			Mile																
ROW (Not Included)																			
ROW required for each segment																			
1 Dense Urban			Acre																
2 Urban			Acre																
3 Dense Suburban			Acre																
4 Suburban			Acre																
5 Undeveloped			Acre																
ROW required for Temp. Construction Easement																			
1 Dense Urban			Acre																
2 Urban			Acre																
3 Dense Suburban			Acre																
4 Suburban			Acre																
5 Undeveloped			Acre																
Right-of-Way Required for Stations, Maintenance & Parking Facilities																			
6 Dense Urban			Acre																
7 Urban			Acre																
8 Dense Suburban			Acre																
9 Suburban			Acre																
10 Undeveloped			Acre																
Environmental Mitigation = 3% Line Costs																			
System Elements																			
1 Signaling (ATC)			Mile			1.57				1.57				1.57				1.57	
2 Communications (w/ Fiber Optic Backbone)			Mile			1.57				1.57				1.57				1.57	
3 Wayside Protection System			Mile			1.57				1.57				1.57				1.57	
Electrification Items																			
1 Traction Power supply			Mile			1.57				1.57				1.57				1.57	
2 Traction Power Distribution			Mile			1.57				1.57				1.57				1.57	
Subtotal																			
Program Implementation Costs (per screening)																			
Program Implementation Costs																			
Contingencies (per screening) (25%)																			
Subtotal							\$ 156,925,136			\$ 111,383,432				\$ 324,761,958				\$ 765,391,892	
Subtotal (Rounded)							\$ 157,000,000			\$ 111,000,000				\$ 325,000,000				\$ 765,000,000	

COST ELEMENTS		UNIT	UNIT PRICE	Tunnel (HST only)			
Subsection 4			Base: 2009 (3rd Quarter)	C			
				Start: 1450 + 00	Start: 1533 + 00	1.57 Miles	
Subsection Details						Quant.	Cost
Double Track At-Grade (Mile)				Start: 0 + 00	Start: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)				Start: 0 + 00		0.00 Miles	
Double Track Tunnel (Mile)				Start: 1450 + 00	End: 1533 + 00	1.57 Miles	
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Elevated (Mile)				Start: 0 + 00		0.00 Miles	
Four Track Tunnel (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Trench (Mile)				Start: 0 + 00		0.00 Miles	
Double Track Section - Total							
1 Double Track Section - At Grade	Mile	\$	2,100,224			0.00	\$ -
2 Double Track Section - On Structure	Mile	\$	4,700,160			0.00	\$ -
3 Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160			1.57	\$ 7,388,509
4 Double Track Section - In Trench	Mile	\$	4,700,160			0.00	\$ -
Four Track Section - Total							
Four-track Section - At Grade	Mile	\$	4,200,448			0.00	\$ -
Four-Track Section - On Structure	Mile	\$	9,400,320			0	\$ -
Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320			0	\$ -
Four-Track Section - In Trench	Mile	\$	9,400,320			0	\$ -
Single Track - Total							
5 Single Track Section - At Grade	Mile	\$	1,549,312			0	\$ -
6 Single Track Section - On structure	Mile	\$	2,350,080			0	\$ -
7 Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080			0	\$ -
8 Single Track Section - In Trench	Mile	\$	2,350,080			0	\$ -
9 Freight Double Track - At Grade	Mile	\$	2,839,552			0	\$ -
10 Freight Single Track - At Grade	Mile	\$	1,549,312			0	\$ -
Earthwork Items							
1 Site Preparation - Undeveloped	Acre	\$	9,216			0.00	\$ -
2 Total Cut	CY	\$	6.00			0.00	\$ -
3 Total Fill	CY	\$	6.00			0.00	\$ -
4 Borrow	CY	\$	13.00			0.00	\$ -
5 Spoil	CY	\$	13.00			0.00	\$ -
6 Landscape erosion Control	Acre	\$	6,144			0.00	\$ -
7 Security Fencing (Both sides of ROW)	Mile	\$	144,384			0.00	\$ -
8 Special Drainage Facilities	5% Earthwork					\$	\$ -
Structures, Tunnels, Walls							
1 Standard Structure (assume cost for 2 track is 60% of unit cost)	Mile	\$	34,972,672			0.00	\$ -
2 High Structure	Mile	\$	40,424,448				\$ -
3 Long Span Structure	Mile	\$	61,919,232				\$ -
4 Waterway Crossing - Primary	Mile	\$	85,342,208				\$ -
5 Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408				\$ -
6 Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264				\$ -
7 Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312			0.00	\$ -
8 Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896			0.00	\$ -
9 Double Track Drill & Blast	Mile	\$	146,887,680			0.00	\$ -
10 Double Track Mined (Soft Soil)	Mile	\$	79,200,000			0.00	\$ -
Double Track TBM (<6 Miles)	Mile	\$	106,637,312			1.57	\$ 167,630,623
Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896				
11 Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952				\$ -
12 Crossovers	ea	\$	442,368				\$ -
13 Cut & Cover Double Track Tunnel	Mile	\$	131,246,080			0.00	\$ -
14 Trench Short	Mile	\$	78,843,904			0.00	\$ -
15 Trench Long	Mile	\$	57,524,224				\$ -
16 Mechanical & Electrical for Tunnels	Mile	\$	11,848,704			1.57	\$ 18,625,804
17 Retaining Walls	Mile	\$	8,613,888			0.00	\$ -
18 Containment Walls	Mile	\$	5,907,456			0.00	\$ -
19 Single Track Cut and Cover Subway	Mile	\$	131,246,080				\$ -
Four Track Drill & Blast	Mile	\$	293,775,360				\$ -
Four Track Mined (Soft Soil)	Mile	\$	158,400,000			0.00	\$ -
Four Track TBM (<6 Miles)	Mile	\$	213,274,624			0.00	\$ -
Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792				\$ -
Four Track Cut & Cover Tunnel	Mile	\$	262,492,160			0.00	\$ -
Grade Separations							
1 Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352				\$ -
Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528				\$ -
2 Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680			0	\$ -
3 Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568				\$ -
4 Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520			0	\$ -
5 Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216				\$ -
Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816				\$ -
6 Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328				\$ -
7 Street Bridging HSR Trench	ea	\$	1,398,784			0	\$ -
8 Minor Crossing Closures	ea	\$	87,040			0	\$ -

COST ELEMENTS		UNIT	UNIT PRICE	Tunnel (HST only)		
Subsection 4			Base: 2009 (3rd Quarter)	C		
				Start: 1450 + 00	Start: 1533 + 00	1.57 Miles
Subsection Details					Quant.	Cost
Double Track At-Grade (Mile)				Start: 0 + 00	Start: 0 + 00	0.00 Miles
Double Track Elevated (Mile)				Start: 0 + 00		0.00 Miles
Double Track Tunnel (Mile)				Start: 1450 + 00	End: 1533 + 00	1.57 Miles
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles
Four Track Elevated (Mile)				Start: 0 + 00		0.00 Miles
Four Track Tunnel (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles
Four Track Trench (Mile)				Start: 0 + 00		0.00 Miles
Building Items						
1 Intermediate Passenger Stations	Each	\$	-			\$ -
2 Terminal Passenger Stations	Each	\$	-			\$ -
Caltrain Passenger Station - At-Grade	Each	\$	15,000,000			\$ -
Caltrain Passenger Station - On Structure	Each	\$	15,000,000			\$ -
Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000			1 \$ 15,000,000
Caltrain Passenger Station - In Trench	Each	\$	15,000,000			\$ -
3 Maintenance Facility	Each	\$	123,921,884			\$ -
4 Parking - Structures	space	\$	-			\$ -
5 Parking - At Grade	space	\$	-			\$ -
Rail & Utility Relocation						
1 Single Track Relocation (Temporary)	Mile	\$	2,000,896			\$ -
2 Single Track Relocation (Permanent)	Mile	\$	2,000,896			\$ -
3 Single Track Removal	Mile	\$	130,048			\$ -
4 Major Utility Relocations - Dense Urban	Mile	\$	1,548,288			\$ -
5 Major Utility Relocations - Urban	Mile	\$	1,084,416			\$ -
6 Major Utility Relocations - Dense Suburban	Mile	\$	775,168			\$ -
7 Major Utility Relocations - Suburban	Mile	\$	464,896			\$ -
8 Major Utility Relocations - Undeveloped	Mile	\$	30,720			\$ -
ROW (Not Included)						
ROW required for each segment						
1 Dense Urban	Acre	\$	2,786,321			\$ -
2 Urban	Acre	\$	1,371,510			\$ -
3 Dense Suburban	Acre	\$	908,134			\$ -
4 Suburban	Acre	\$	208,418			\$ -
5 Undeveloped	Acre	\$	3,642			\$ -
ROW required for Temp. Construction Easement						\$ -
1 Dense Urban	Acre					\$ -
2 Urban	Acre					\$ -
3 Dense Suburban	Acre					\$ -
4 Suburban	Acre					\$ -
5 Undeveloped	Acre					\$ -
Right-of-Way Required for Stations, Maintenance & Parking Facilities						
6 Dense Urban	Acre	\$	2,786,321			\$ -
7 Urban	Acre	\$	1,371,510			\$ -
8 Dense Suburban	Acre	\$	908,134			\$ -
9 Suburban	Acre	\$	208,418			\$ -
10 Undeveloped	Acre	\$	3,642			\$ -
Environmental Mitigation = 3% Line Costs						\$ 6,259,348
System Elements						
1 Signaling (ATC)	Mile	\$	2,070,000			1.57 \$ 3,253,977
2 Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			1.57 \$ 848,864
3 Wayside Protection System	Mile	\$	108,000			1.57 \$ 169,773
Electrification Items						
1 Traction Power supply	Mile	\$	1,170,000			1.57 \$ 1,839,205
2 Traction Power Distribution	Mile	\$	1,485,000			1.57 \$ 2,334,375
Subtotal						\$ 223,350,477
Program Implementation Costs (per screening)						\$ 56,954,372
Program Implementation Costs						
Contingencies (per screening) (25%)						\$ 55,837,619
Subtotal						\$ 336,142,468
Subtotal (Rounded)						\$ 336,000,000

COST ELEMENTS			UNIT	UNIT PRICE	Aerial Viaduct (HST only)				At-Grade (CALTRAIN only)				Open Trench (HST only)				Covered Trench (HST only)				
Subsection 4				Base: 2009 (3rd Quarter)	D				D				D				D				
					Start: 1533 + 00	Start: 1565 + 00	0.61 Miles		Start: 1533 + 00	End: 1565 + 00	0.61 Miles		Start: 1533 + 00	Start: 1565 + 00	0.61 Miles		Start: 1533 + 00	Start: 1565 + 00	0.61 Miles		
Subsection Details							Quant.	Cost			Quant.	Cost			Quant.	Cost			Quant.	Cost	
Double Track At-Grade (Mile)					Start: 0 + 00	Start: 0 + 00	0.00 Miles		Start: 1533 + 00	End: 1565 + 00	0.61 Miles		Start: 0 + 00	Start: 0 + 00	0.00 Miles		Start: 0 + 00	Start: 0 + 00	0.00 Miles		
Double Track Elevated (Mile)					Start: 1533 + 00	End: 1565 + 00	0.61 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1533 + 00	End: 1565 + 00	0.61 Miles		
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1533 + 00	End: 1565 + 00	0.61 Miles		Start: 0 + 00		0.00 Miles		
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
Four Track Elevated (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
Four Track Trench (Mile)					Start: 0 + 00	0.00 Miles	0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00		0.00 Miles		
Double Track Section - Total																					
1 Double Track Section - At Grade	Mile	\$	2,100,224				0.00	\$	-		0.61	\$	1,272,863		0.00	\$	-		0.00	\$	-
2 Double Track Section - On Structure	Mile	\$	4,700,160				0.61	\$	2,848,582		0.00	\$	-		0.00	\$	-		0.00	\$	-
3 Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160				0.00	\$	-		0.00	\$	-		0.00	\$	-		0.61	\$	2,848,582
4 Double Track Section - In Trench	Mile	\$	4,700,160				0.00	\$	-		0.00	\$	-		0.61	\$	2,848,582		0.00	\$	-
Four Track Section - Total																					
Four-track Section - At Grade	Mile	\$	4,200,448				0.00	\$	-		0.00	\$	-		0.00	\$	-		0.00	\$	-
Four-Track Section - On Structure	Mile	\$	9,400,320				0.00	\$	-		0.00	\$	-		0	\$	-		0	\$	-
Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320				0.00	\$	-		0.00	\$	-		0	\$	-		0.00	\$	-
Four-Track Section - In Trench	Mile	\$	9,400,320				0.00	\$	-		0.00	\$	-		0.00	\$	-		0	\$	-
Single Track - Total																					
5 Single Track Section - At Grade	Mile	\$	1,549,312				0.00	\$	-		0.00	\$	-		0	\$	-		0	\$	-
6 Single Track Section - On structure	Mile	\$	2,350,080				0.00	\$	-		0.00	\$	-		0	\$	-		0	\$	-
7 Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080				0.00	\$	-		0.00	\$	-		0	\$	-		0	\$	-
8 Single Track Section - In Trench	Mile	\$	2,350,080				0.00	\$	-		0.00	\$	-		0	\$	-		0	\$	-
9 Freight Double Track - At Grade	Mile	\$	2,839,552				0.00	\$	-		0.00	\$	-		0	\$	-		0	\$	-
10 Freight Single Track - At Grade	Mile	\$	1,549,312				0.00	\$	-		0.00	\$	-		0	\$	-		0	\$	-
Earthwork Items																					
1 Site Preparation - Undeveloped	Acre	\$	9,216				0.00	\$	-		0.00	\$	-		8.08	\$	74,473		8.08	\$	74,473
2 Total Cut	CY	\$	6.00				0.00	\$	-		0.00	\$	-		260740.74	\$	1,564,444		260740.74	\$	1,564,444
3 Total Fill	CY	\$	6.00				0.00	\$	-		0.00	\$	-			\$	-			\$	-
4 Borrow	CY	\$	13.00				0.00	\$	-		0.00	\$	-		0.00	\$	-		0.00	\$	-
5 Spoil	CY	\$	13.00				0.00	\$	-		0.00	\$	-		260740.74	\$	3,389,630		260740.74	\$	3,389,630
6 Landscape erosion Control	Acre	\$	6,144				0.00	\$	-		0.00	\$	-		8.08	\$	49,648		8.08	\$	49,648
7 Security Fencing (Both sides of ROW)	Mile	\$	144,384				0.00	\$	-		0.00	\$	-		0.61	\$	87,505		0.61	\$	87,505
8 Special Drainage Facilities	5% Earthwork							\$	-			\$	-			\$	258,285			\$	258,285
Structures, Tunnels, Walls																					
1 Standard Structure	Mile	\$	34,972,672				0.00	\$	-		0.00	\$	-		0.00	\$	-		0.00	\$	-
2 High Structure	Mile	\$	40,424,448					\$	-			\$	-			\$	-			\$	-
3 Long Span Structure	Mile	\$	61,919,232					\$	-			\$	-			\$	-			\$	-
4 Waterway Crossing - Primary	Mile	\$	85,342,208					\$	-			\$	-			\$	-			\$	-
5 Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408					\$	-			\$	-			\$	-			\$	-
6 Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264					\$	-			\$	-			\$	-			\$	-
7 Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312					\$	-			\$	-			\$	-			\$	-
8 Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896					\$	-			\$	-			\$	-			\$	-
9 Double Track Drill & Blast	Mile	\$	146,887,680				0.00	\$	-		0.00	\$	-		0.00	\$	-		0.00	\$	-
10 Double Track Mined (Soft Soil)	Mile	\$	79,200,000					\$	-			\$	-			\$	-			\$	-
Double Track TBM (<6 Miles)	Mile	\$	106,637,312																		
Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896																		
11 Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952					\$	-			\$	-			\$	-			\$	-
12 Crossovers	ea	\$	442,368					\$	-			\$	-			\$	-			\$	-
13 Cut & Cover Double Track Tunnel	Mile	\$	131,246,080				0.00	\$	-		0.00	\$	-		0.00	\$	-		0.61	\$	79,543,079
14 Trench Short	Mile	\$	78,843,904				0.00	\$	-		0.00	\$	-		0.61	\$	47,784,184		0.00	\$	-
15 Trench Long	Mile	\$	57,524,224					\$	-			\$	-			\$	-			\$	-
16 Mechanical & Electrical for Tunnels	Mile	\$	11,848,704					\$	-			\$	-			\$	-		0.61	\$	7,181,033
17 Retaining Walls	Mile	\$	8,613,888				0.00	\$	-		0.00	\$	-		0.61	\$	5,220,538		0.00	\$	-
18 Containment Walls	Mile	\$	5,907,456				0.00	\$	-		0.00	\$	-		0.61	\$	3,580,276		0.00	\$	-
19 Single Track Cut and Cover Subway	Mile	\$	131,246,080					\$	-			\$	-			\$	-			\$	-
Four Track Drill & Blast	Mile	\$	293,775,360					\$	-			\$	-			\$	-			\$	-
Four Track Mined (Soft Soil)	Mile	\$	158,400,000					\$	-			\$	-			\$	-			\$	-
Four Track TBM (<6 Miles)	Mile	\$	213,274,624																		
Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792																		
Four Track Cut & Cover Tunnel	Mile	\$	262,492,160				0.00	\$	-		0.00	\$	-		0.00	\$	-		0.00	\$	-
Grade Separations																					
1 Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352				1	\$	13,284,352			\$	-			\$	-			\$	-
Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528				0	\$	-		0	\$	-			\$	-			\$	-
2 Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680				0	\$	-		0	\$	-			\$	-		0	\$	-
3 Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568					\$	-			\$	-			\$	-			\$	-
4 Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520					\$	-			\$	-			\$	-			\$	-
5 Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216					\$	-			\$	-			\$	-			\$	-
Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816					\$	-			\$	-			\$	-			\$	-
6 Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328					\$	-			\$	-			\$	-			\$	-
7 Street Bridging HSR Trench	ea	\$	1,398,784					\$	-			\$	-		0	\$	-		0	\$	-
8 Minor Crossing Closures	ea	\$	87,040					\$	-			\$	-			\$	-		0	\$	-

COST ELEMENTS			UNIT	UNIT PRICE	Aerial Viaduct (HST only)				At-Grade (CALTRAIN only)				Open Trench (HST only)				Covered Trench (HST only)			
Subsection 4			Base: 2009 (3rd Quarter)	D				D				D				D				
				Start: 1533 + 00	Start: 1565 + 00	0.61 Miles		Start: 1533 + 00	End: 1565 + 00	0.61 Miles		Start: 1533 + 00	Start: 1565 + 00	0.61 Miles		Start: 1533 + 00	Start: 1565 + 00	0.61 Miles		
Subsection Details						Quant.	Cost			Quant.	Cost			Quant.	Cost			Quant.	Cost	
Double Track At-Grade (Mile)				Start: 0 + 00	Start: 0 + 00	0.00 Miles		Start: 1533 + 00	End: 1565 + 00	0.61 Miles		Start: 0 + 00	Start: 0 + 00	0.00 Miles		Start: 0 + 00	Start: 0 + 00	0.00 Miles		
Double Track Elevated (Mile)				Start: 1533 + 00	End: 1565 + 00	0.61 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Double Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1533 + 00	End: 1565 + 00	0.61 Miles		
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1533 + 00	End: 1565 + 00	0.61 Miles		Start: 0 + 00		0.00 Miles		
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
Four Track Elevated (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Four Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
Four Track Trench (Mile)				Start: 0 + 00	0.00 Miles	0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00		0.00 Miles		
1	Building Items																			
1	Intermediate Passenger Stations	Each	\$	-						\$	-				\$	-			\$	-
2	Terminal Passenger Stations	Each	\$	-						\$	-				\$	-			\$	-
	Caltrain Passenger Station - At-Grade	Each	\$15,000,000							\$	-				\$	-			\$	-
	Caltrain Passenger Station - On Structure	Each	\$15,000,000							\$	-				\$	-			\$	-
	Caltrain Passenger Station - In Tunnel or Subway	Each	\$15,000,000							\$	-				\$	-			\$	-
	Caltrain Passenger Station - In Trench	Each	\$15,000,000							\$	-				\$	-			\$	-
3	Maintenance Facility	Each	\$ 123,921,884							\$	-				\$	-			\$	-
4	Parking - Structures	space	\$	-						\$	-				\$	-			\$	-
5	Parking - At Grade	space	\$	-						\$	-				\$	-			\$	-
Rail & Utility Relocation																				
1	Single Track Relocation (Temporary)	Mile	\$ 2,000,896							\$	-				\$	-			\$	-
2	Single Track Relocation (Permanent)	Mile	\$ 2,000,896							\$	-				\$	-			\$	-
3	Single Track Removal	Mile	\$ 130,048							\$	-				\$	-			\$	-
4	Major Utility Relocations - Dense Urban	Mile	\$ 1,548,288							\$	-				\$	-			\$	-
5	Major Utility Relocations - Urban	Mile	\$ 1,084,416							\$	-				\$	-			\$	-
6	Major Utility Relocations - Dense Suburban	Mile	\$ 775,168							\$	-				\$	-			\$	-
7	Major Utility Relocations - Suburban	Mile	\$ 464,896							\$	-				\$	-			\$	-
8	Major Utility Relocations - Undeveloped	Mile	\$ 30,720							\$	-				\$	-			\$	-
ROW (Not Included)																				
ROW required for each segment																				
1	Dense Urban	Acre	\$ 2,786,321							\$	-				\$	-			\$	-
2	Urban	Acre	\$ 1,371,510							\$	-				\$	-			\$	-
3	Dense Suburban	Acre	\$ 908,134							\$	-				\$	-			\$	-
4	Suburban	Acre	\$ 208,418							\$	-				\$	-			\$	-
5	Undeveloped	Acre	\$ 3,642							\$	-				\$	-			\$	-
ROW required for Temp. Construction Easement										\$	-				\$	-			\$	-
1	Dense Urban	Acre				B				B					\$	-			\$	-
2	Urban	Acre								\$	-				\$	-			\$	-
3	Dense Suburban	Acre								\$	-				\$	-			\$	-
4	Suburban	Acre								\$	-				\$	-			\$	-
5	Undeveloped	Acre								\$	-				\$	-			\$	-
Right-of-Way Required for Stations, Maintenance & Parking Facilities																				
6	Dense Urban	Acre	\$ 2,786,321							\$	-				\$	-			\$	-
7	Urban	Acre	\$ 1,371,510							\$	-				\$	-			\$	-
8	Dense Suburban	Acre	\$ 908,134							\$	-				\$	-			\$	-
9	Suburban	Acre	\$ 208,418							\$	-				\$	-			\$	-
10	Undeveloped	Acre	\$ 3,642							\$	-				\$	-			\$	-
Environmental Mitigation = 3% Line Costs										\$ 483,988					\$ 1,945,727				\$ 2,849,900	
System Elements																				
1	Signaling (ATC)	Mile	\$ 2,070,000			0.61	\$ 1,254,545			0.61	\$ 1,254,545			0.61	\$ 1,254,545			0.61	\$ 1,254,545	
2	Communications (w/ Fiber Optic Backbone)	Mile	\$ 540,000			0.61	\$ 327,273			0.61	\$ 327,273			0.61	\$ 327,273			0.61	\$ 327,273	
3	Wayside Protection System	Mile	\$ 108,000			0.61	\$ 65,455			0.61	\$ 65,455			0.61	\$ 65,455			0.61	\$ 65,455	
Electrification Items																				
1	Traction Power supply	Mile	\$ 1,170,000			0.61	\$ 709,091			0.61	\$ 709,091			0.61	\$ 709,091			0.61	\$ 709,091	
2	Traction Power Distribution	Mile	\$ 1,485,000			0.61	\$ 900,000			0.61	\$ 900,000			0.61	\$ 900,000			0.61	\$ 900,000	
Subtotal							\$ 19,873,285			\$ 4,567,413				\$ 70,059,657				\$ 101,102,943		
Program Implementation Costs (per screening)							\$ 5,067,688			\$ 1,164,690				\$ 17,865,213				\$ 25,781,250		
Program Implementation Costs																				
Contingencies (per screening) (25%)							\$ 4,968,321			\$ 1,141,853				\$ 17,514,914				\$ 25,275,736		
Subtotal							\$ 29,909,295			\$ 6,873,956				\$ 105,439,784				\$ 152,159,929		
Subtotal (Rounded)							\$ 30,000,000			\$ 7,000,000				\$ 105,000,000				\$ 152,000,000		

COST ELEMENTS		UNIT	UNIT PRICE	Tunnel (HST only)			
Subsection 4			Base: 2009 (3rd Quarter)	D			
				Start: 1533 + 00	Start: 1565 + 00	0.61 Miles	
Subsection Details						Quant.	Cost
Double Track At-Grade (Mile)				Start: 0 + 00	Start: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)				Start: 0 + 00		0.00 Miles	
Double Track Tunnel (Mile)				Start: 1533 + 00	End: 1565 + 00	0.61 Miles	
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Elevated (Mile)				Start: 0 + 00		0.00 Miles	
Four Track Tunnel (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Trench (Mile)				Start: 0 + 00		0.00 Miles	
Double Track Section - Total							
1 Double Track Section - At Grade	Mile	\$	2,100,224			0.00	\$ -
2 Double Track Section - On Structure	Mile	\$	4,700,160			0.00	\$ -
3 Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160			0.61	\$ 2,848,582
4 Double Track Section - In Trench	Mile	\$	4,700,160			0.00	\$ -
Four Track Section - Total							
Four-track Section - At Grade	Mile	\$	4,200,448			0.00	\$ -
Four-Track Section - On Structure	Mile	\$	9,400,320			0	\$ -
Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320			0.00	
Four-Track Section - In Trench	Mile	\$	9,400,320			0	\$ -
Single Track - Total							
5 Single Track Section - At Grade	Mile	\$	1,549,312			0	\$ -
6 Single Track Section - On structure	Mile	\$	2,350,080			0	\$ -
7 Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080			0	\$ -
8 Single Track Section - In Trench	Mile	\$	2,350,080			0	\$ -
9 Freight Double Track - At Grade	Mile	\$	2,839,552			0	\$ -
10 Freight Single Track - At Grade	Mile	\$	1,549,312			0	\$ -
Earthwork Items							
1 Site Preparation - Undeveloped	Acre	\$	9,216			0.00	\$ -
2 Total Cut	CY	\$	6.00			0.00	\$ -
3 Total Fill	CY	\$	6.00			0.00	\$ -
4 Borrow	CY	\$	13.00			0.00	\$ -
5 Spoil	CY	\$	13.00			0.00	\$ -
6 Landscape erosion Control	Acre	\$	6,144			0.00	\$ -
7 Security Fencing (Both sides of ROW)	Mile	\$	144,384			0.00	\$ -
8 Special Drainage Facilities	5% Earthwork					\$	\$ -
Structures, Tunnels, Walls							
1 Standard Structure	Mile	\$	34,972,672			0.00	\$ -
2 High Structure	Mile	\$	40,424,448				\$ -
3 Long Span Structure	Mile	\$	61,919,232				\$ -
4 Waterway Crossing - Primary	Mile	\$	85,342,208				\$ -
5 Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408				\$ -
6 Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264				\$ -
7 Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312				\$ -
8 Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896				\$ -
9 Double Track Drill & Blast	Mile	\$	146,887,680			0.00	\$ -
10 Double Track Mined (Soft Soil)	Mile	\$	79,200,000				\$ -
Double Track TBM (<6 Miles)	Mile	\$	106,637,312			0.61	\$ 64,628,674
Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896				
11 Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952				\$ -
12 Crossovers	ea	\$	442,368				\$ -
13 Cut & Cover Double Track Tunnel	Mile	\$	131,246,080			0.00	\$ -
14 Trench Short	Mile	\$	78,843,904			0.00	\$ -
15 Trench Long	Mile	\$	57,524,224				\$ -
16 Mechanical & Electrical for Tunnels	Mile	\$	11,848,704			0.61	\$ 7,181,033
17 Retaining Walls	Mile	\$	8,613,888			0.00	\$ -
18 Containment Walls	Mile	\$	5,907,456			0.00	\$ -
19 Single Track Cut and Cover Subway	Mile	\$	131,246,080				\$ -
Four Track Drill & Blast	Mile	\$	293,775,360				\$ -
Four Track Mined (Soft Soil)	Mile	\$	158,400,000			0.00	\$ -
Four Track TBM (<6 Miles)	Mile	\$	213,274,624			0.00	\$ -
Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792				\$ -
Four Track Cut & Cover Tunnel	Mile	\$	262,492,160			0.00	\$ -
Grade Separations							
1 Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352				\$ -
Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528				\$ -
2 Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680			0	\$ -
3 Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568				\$ -
4 Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520				\$ -
5 Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216				\$ -
Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816				\$ -
6 Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328				\$ -
7 Street Bridging HSR Trench	ea	\$	1,398,784			0	\$ -
8 Minor Crossing Closures	ea	\$	87,040			0	\$ -

COST ELEMENTS			UNIT	UNIT PRICE	Tunnel (HST only)			
Subsection 4			Base: 2009 (3rd Quarter)	D				
				Start: 1533 + 00	Start: 1565 + 00	0.61 Miles		
Subsection Details						Quant.	Cost	
Double Track At-Grade (Mile)				Start: 0 + 00	Start: 0 + 00	0.00 Miles		
Double Track Elevated (Mile)				Start: 0 + 00		0.00 Miles		
Double Track Tunnel (Mile)				Start: 1533 + 00	End: 1565 + 00	0.61 Miles		
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles		
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles		
Four Track Elevated (Mile)				Start: 0 + 00		0.00 Miles		
Four Track Tunnel (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles		
Four Track Trench (Mile)				Start: 0 + 00		0.00 Miles		
Building Items								
1 Intermediate Passenger Stations	Each	\$	-				\$	-
2 Terminal Passenger Stations	Each	\$	-				\$	-
Caltrain Passenger Station - At-Grade	Each	\$	15,000,000				\$	-
Caltrain Passenger Station - On Structure	Each	\$	15,000,000				\$	-
Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000				\$	-
Caltrain Passenger Station - In Trench	Each	\$	15,000,000				\$	-
3 Maintenance Facility	Each	\$	123,921,884				\$	-
4 Parking - Structures	space	\$	-				\$	-
5 Parking - At Grade	space	\$	-				\$	-
Rail & Utility Relocation								
1 Single Track Relocation (Temporary)	Mile	\$	2,000,896				\$	-
2 Single Track Relocation (Permanent)	Mile	\$	2,000,896				\$	-
3 Single Track Removal	Mile	\$	130,048				\$	-
4 Major Utility Relocations - Dense Urban	Mile	\$	1,548,288				\$	-
5 Major Utility Relocations - Urban	Mile	\$	1,084,416				\$	-
6 Major Utility Relocations - Dense Suburban	Mile	\$	775,168				\$	-
7 Major Utility Relocations - Suburban	Mile	\$	464,896				\$	-
8 Major Utility Relocations - Undeveloped	Mile	\$	30,720				\$	-
ROW (Not Included)								
ROW required for each segment								
1 Dense Urban	Acre	\$	2,786,321				\$	-
2 Urban	Acre	\$	1,371,510				\$	-
3 Dense Suburban	Acre	\$	908,134				\$	-
4 Suburban	Acre	\$	208,418				\$	-
5 Undeveloped	Acre	\$	3,642				\$	-
ROW required for Temp. Construction Easement							\$	-
1 Dense Urban	Acre						\$	-
2 Urban	Acre						\$	-
3 Dense Suburban	Acre						\$	-
4 Suburban	Acre						\$	-
5 Undeveloped	Acre						\$	-
Right-of-Way Required for Stations, Maintenance & Parking Facilities								
6 Dense Urban	Acre	\$	2,786,321				\$	-
7 Urban	Acre	\$	1,371,510				\$	-
8 Dense Suburban	Acre	\$	908,134				\$	-
9 Suburban	Acre	\$	208,418				\$	-
10 Undeveloped	Acre	\$	3,642				\$	-
Environmental Mitigation = 3% Line Costs							\$	2,239,749
System Elements								
1 Signaling (ATC)	Mile	\$	2,070,000				0.61	\$ 1,254,545
2 Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000				0.61	\$ 327,273
3 Wayside Protection System	Mile	\$	108,000				0.61	\$ 65,455
Electrification Items								
1 Traction Power supply	Mile	\$	1,170,000				0.61	\$ 709,091
2 Traction Power Distribution	Mile	\$	1,485,000				0.61	\$ 900,000
Subtotal							\$	80,154,401
Program Implementation Costs (per screening)							\$	20,439,372
Program Implementation Costs								
Contingencies (per screening) (25%)							\$	20,038,600
Subtotal							\$	120,632,373
Subtotal (Rounded)							\$	121,000,000

Subsection 5	5A (0.8 miles)		5B (1.7 miles)					5C (1.0 miles)		
	At Grade	Deep Tunnel (HST Only)	Aerial Viaduct	At Grade	Open Trench	Covered Trench/Tunnel	Deep Tunnel (HST Only)	At-Grade	Covered Trench/Tunnel	Deep Tunnel (HST Only)
Capital Cost (\$2009 in Millions) does not include ROW	\$11 (4 tracks) \$9 (2 tracks)	\$151 (2 tracks)	\$178 (4 tracks) \$166 (2 tracks)	\$98 (4 tracks) \$39 (2 tracks)	\$355 (4 tracks) \$343 (2 tracks)	\$833 (4 tracks) \$474 (2 tracks)	\$524 (2 tracks)	\$20 (4 tracks) \$16 (2 tracks)	\$588 (4 tracks) \$610 (2 tracks)	\$671 (2 tracks)
Acquisition Cost of Permanent ROW	Highest	Lowest	Medium	Highest	Medium	Lowest	Lowest	Highest	Lowest	Lowest
Notes:	4 tracks - 1. Four tracks on existing Caltrain alignment. 2. Existing 4-track alignment. 2 tracks (2 HST)- 1. Two tracks on existing Caltrain alignment. 2. <i>Must be combined with 2 track deep tunnel option.</i>	2 tracks - 1. <i>Must be combined with 2 track at grade option.</i>	4 tracks - 1. Caltrain Atherton and Menlo Park stations; 2 tracks - 1. Caltrain Atherton and Menlo Park stations. 2. <i>Must be combined with 2 track deep tunnel option.</i>	4 tracks - 1. Caltrain Atherton and Menlo Park stations; 2. Grade separations at Fair Oaks Lane, Watkins Ave, Encinal Ave, Glenwood Ave, Oak Grove Ave, and Ravenswood Ave. 2 tracks - 1. Grade separations at Fair Oaks Lane, Watkins Ave, Encinal Ave, Glenwood Ave, Oak Grove Ave, and Ravenswood Ave. 2. <i>Must be combined with 2 track deep tunnel option.</i>	4 tracks - 1. Caltrain Atherton and Menlo Park stations; 2 tracks - 1. Caltrain Atherton and Menlo Park stations; 2. <i>Must be combined with 2 track deep tunnel option.</i>	4 tracks - 1. Caltrain Atherton and Menlo Park stations; 2 tracks - 1. Caltrain Atherton and Menlo Park stations; 2. <i>Must be combined with 2 track deep tunnel option.</i>	2 tracks - 1. <i>Must be combined with 2 track aerial viaduct, at grade, trench, or tunnel option.</i>	4 tracks - No notes. 2 tracks - 1. <i>Must be combined with 2 track deep tunnel option.</i>	4 tracks - No notes. 2 tracks - 1. <i>Must be combined with 2 track deep tunnel option.</i>	2 tracks - 1. <i>Must be combined with 2 track at grade, trench, or tunnel option.</i>

COST ELEMENTS			UNIT	UNIT PRICE	At-Grade (2 tracks)			At-Grade (4 tracks)				Tunnel (HST only)					
Subsection 5			Base: 2009 (3rd Quarter)	A			A				A						
				Start: 1565 + 00	End: 1605 + 00	0.76 Miles	Start: 1565 + 00	End: 1605 + 00	0.76 Miles	Start: 1565 + 00	Start: 1605 + 00	0.76 Miles					
Subsection Details						Quant.	Cost			Quant.	Cost			Quant.	Cost		
Double Track At-Grade (Mile)					Start: 1565 + 00	End: 1605 + 00	0.76 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	Start: 0 + 00	0.00 Miles		
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1565 + 00	End: 1605 + 00	0.76 Miles		
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1565 + 00	End: 1605 + 00	0.76 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
Four Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Double Track Section - Total																	
1	Double Track Section - At Grade	Mile	\$	2,100,224			0.76	\$	1,591,079			0.00	\$	-	0.00	\$	-
2	Double Track Section - On Structure	Mile	\$	4,700,160			0.00	\$	-			0.00	\$	-	0.00	\$	-
3	Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160			0.00	\$	-			0.00	\$	-	0.76 Miles	\$	3,560,727
4	Double Track Section - In Trench	Mile	\$	4,700,160			0.00	\$	-			0.00	\$	-	0.00	\$	-
Four Track Section - Total																	
	Four-track Section - At Grade	Mile	\$	4,200,448			0.00	\$	-			0.76	\$	3,182,158	0.00	\$	-
	Four-Track Section - On Structure	Mile	\$	9,400,320			0	\$	-			0	\$	-	0	\$	-
	Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320			0	\$	-			0	\$	-	0.00 Miles	\$	-
	Four-Track Section - In Trench	Mile	\$	9,400,320			0.00	\$	-			0.00	\$	-	0	\$	-
Single Track - Total																	
5	Single Track Section - At Grade	Mile	\$	1,549,312			0	\$	-			0	\$	-	0	\$	-
6	Single Track Section - On structure	Mile	\$	2,350,080			0	\$	-			0	\$	-	0	\$	-
7	Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080			0	\$	-			0	\$	-	0	\$	-
8	Single Track Section - In Trench	Mile	\$	2,350,080			0	\$	-			0	\$	-	0	\$	-
9	Freight Double Track - At Grade	Mile	\$	2,839,552			0	\$	-			0	\$	-	0	\$	-
10	Freight Single Track - At Grade	Mile	\$	1,549,312			0	\$	-			0	\$	-	0	\$	-
Earthwork Items																	
1	Site Preparation - Undeveloped	Acre	\$	9,216			6.31	\$	58,153			6.31	\$	58,153	0.00	\$	-
2	Total Cut	CY	\$	6.00			0.00	\$	-			0.00	\$	-	0.00	\$	-
3	Total Fill	CY	\$	6.00			0.00	\$	-			0.00	\$	-	0.00	\$	-
4	Borrow	CY	\$	13.00			0.00	\$	-			0.00	\$	-	0.00	\$	-
5	Spoil	CY	\$	13.00			0.00	\$	-			0.00	\$	-	0.00	\$	-
6	Landscape erosion Control	Acre	\$	6,144			6.31	\$	38,769			6.31	\$	38,769	0.00	\$	-
7	Security Fencing (Both sides of ROW)	Mile	\$	144,384			0.76	\$	109,382			0.76	\$	109,382	0.00	\$	-
8	Special Drainage Facilities	5% Earthwork						\$	10,315				\$	10,315		\$	-
Structures, Tunnels, Walls																	
1	Standard Structure	Mile	\$	34,972,672			0.00	\$	-			0.00	\$	-	0.00	\$	-
2	High Structure	Mile	\$	40,424,448				\$	-				\$	-		\$	-
3	Long Span Structure	Mile	\$	61,919,232				\$	-				\$	-		\$	-
4	Waterway Crossing - Primary	Mile	\$	85,342,208			0	\$	-			0	\$	-		\$	-
5	Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408				\$	-				\$	-		\$	-
6	Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264				\$	-				\$	-		\$	-
7	Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312				\$	-				\$	-		\$	-
8	Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896				\$	-				\$	-		\$	-
9	Double Track Drill & Blast	Mile	\$	146,887,680			0.00	\$	-			0.00	\$	-	0.00	\$	-
10	Double Track Mined (Soft Soil)	Mile	\$	79,200,000				\$	-				\$	-	0.00	\$	-
	Double Track TBM (<6 Miles)	Mile	\$	106,637,312				\$	-				\$	-	0.76	\$	80,785,842
	Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896				\$	-				\$	-			
11	Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952				\$	-				\$	-		\$	-
12	Crossovers	ea	\$	442,368				\$	-				\$	-		\$	-
13	Cut & Cover Double Track Tunnel	Mile	\$	131,246,080			0.00	\$	-			0.00	\$	-	0.00	\$	-
14	Trench Short	Mile	\$	78,843,904			0.00	\$	-			0.00	\$	-	0.00	\$	-
15	Trench Long	Mile	\$	57,524,224				\$	-				\$	-		\$	-
16	Mechanical & Electrical for Tunnels	Mile	\$	11,848,704				\$	-				\$	-	0.76	\$	8,976,291
17	Retaining Walls	Mile	\$	8,613,888			0.00	\$	-			0.00	\$	-	0.00	\$	-
18	Containment Walls	Mile	\$	5,907,456			0.00	\$	-			0.00	\$	-	0.00	\$	-
19	Single Track Cut and Cover Subway	Mile	\$	131,246,080				\$	-				\$	-		\$	-
	Four Track Drill & Blast	Mile	\$	293,775,360				\$	-				\$	-		\$	-
	Four Track Mined (Soft Soil)	Mile	\$	158,400,000				\$	-				\$	-	0.00	\$	-
	Four Track TBM (<6 Miles)	Mile	\$	213,274,624				\$	-				\$	-	0.00	\$	-
	Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792				\$	-				\$	-		\$	-
	Four Track Cut & Cover Tunnel	Mile	\$	262,492,160			0.00	\$	-			0.00	\$	-	0.00	\$	-
Grade Separations																	
1	Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352				\$	-				\$	-		\$	-
	Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528				\$	-				\$	-		\$	-
2	Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680			0	\$	-			0	\$	-	0	\$	-
3	Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568				\$	-				\$	-		\$	-
4	Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520			0	\$	-			0	\$	-		\$	-
5	Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216				\$	-				\$	-		\$	-
	Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816			0	\$	-			0	\$	-		\$	-
6	Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328				\$	-				\$	-		\$	-
7	Street Bridging HSR Trench	ea	\$	1,398,784				\$	-				\$	-	0	\$	-
8	Minor Crossing Closures	ea	\$	87,040				\$	-				\$	-	0	\$	-
Building Items																	

COST ELEMENTS			UNIT	UNIT PRICE	At-Grade (2 tracks)		At-Grade (4 tracks)				Tunnel (HST only)						
Subsection 5			Base: 2009 (3rd Quarter)	A		A				A							
				Start: 1565 + 00	End: 1605 + 00	0.76 Miles		Start: 1565 + 00	End: 1605 + 00	0.76 Miles		Start: 1565 + 00	Start: 1605 + 00	0.76 Miles			
Subsection Details						Quant.	Cost			Quant.	Cost			Quant.	Cost		
Double Track At-Grade (Mile)				Start: 1565 + 00	End: 1605 + 00	0.76 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	Start: 0 + 00	0.00 Miles			
Double Track Elevated (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Double Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1565 + 00	End: 1605 + 00	0.76 Miles			
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1565 + 00	End: 1605 + 00	0.76 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Elevated (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
1 Intermediate Passenger Stations	Each	\$	-				\$	-			\$	-			\$	-	
2 Terminal Passenger Stations	Each	\$	-				\$	-			\$	-			\$	-	
Caltrain Passenger Station - At-Grade	Each	\$	15,000,000				\$	-			\$	-			\$	-	
Caltrain Passenger Station - On Structure	Each	\$	15,000,000				\$	-			\$	-			\$	-	
Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000				\$	-			\$	-		0	\$	-	
Caltrain Passenger Station - In Trench	Each	\$	15,000,000				\$	-			\$	-			\$	-	
3 Maintenance Facility	Each	\$	123,921,884				\$	-			\$	-			\$	-	
4 Parking - Structures	space	\$	-				\$	-			\$	-			\$	-	
5 Parking - At Grade	space	\$	-				\$	-			\$	-			\$	-	
Rail & Utility Relocation																	
1 Single Track Relocation (Temporary)	Mile	\$	2,000,896				\$	-			\$	-			\$	-	
2 Single Track Relocation (Permanent)	Mile	\$	2,000,896				\$	-			\$	-			\$	-	
3 Single Track Removal	Mile	\$	130,048				\$	-			\$	-			\$	-	
4 Major Utility Relocations - Dense Urban	Mile	\$	1,548,288				\$	-			\$	-			\$	-	
5 Major Utility Relocations - Urban	Mile	\$	1,084,416				\$	-			\$	-			\$	-	
6 Major Utility Relocations - Dense Suburban	Mile	\$	775,168				\$	-			\$	-			\$	-	
7 Major Utility Relocations - Suburban	Mile	\$	464,896				\$	-			\$	-			\$	-	
8 Major Utility Relocations - Undeveloped	Mile	\$	30,720				\$	-			\$	-			\$	-	
ROW (Not Included)																	
ROW required for each segment																	
1 Dense Urban	Acre	\$	2,786,321				\$	-			\$	-			\$	-	
2 Urban	Acre	\$	1,371,510				\$	-			\$	-			\$	-	
3 Dense Suburban	Acre	\$	908,134				\$	-			\$	-			\$	-	
4 Suburban	Acre	\$	208,418				\$	-			\$	-			\$	-	
5 Undeveloped	Acre	\$	3,642				\$	-			\$	-			\$	-	
ROW required for Temp. Construction Easement							\$	-			\$	-			\$	-	
1 Dense Urban	Acre						\$	-			\$	-			\$	-	
2 Urban	Acre						\$	-			\$	-			\$	-	
3 Dense Suburban	Acre						\$	-			\$	-			\$	-	
4 Suburban	Acre						\$	-			\$	-			\$	-	
5 Undeveloped	Acre						\$	-			\$	-			\$	-	
Right-of-Way Required for Stations, Maintenance & Parking Facilities																	
6 Dense Urban	Acre	\$	2,786,321				\$	-			\$	-			\$	-	
7 Urban	Acre	\$	1,371,510				\$	-			\$	-			\$	-	
8 Dense Suburban	Acre	\$	908,134				\$	-			\$	-			\$	-	
9 Suburban	Acre	\$	208,418				\$	-			\$	-			\$	-	
10 Undeveloped	Acre	\$	3,642				\$	-			\$	-			\$	-	
Environmental Mitigation = 3% Line Costs							\$	54,231			\$	101,963			\$	2,799,686	
System Elements																	
1 Signaling (ATC)	Mile	\$	2,070,000			0.76	\$	1,568,182			0.76	\$	1,568,182		0.76	\$	1,568,182
2 Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			0.76	\$	409,091			0.76	\$	409,091		0.76	\$	409,091
3 Wayside Protection System	Mile	\$	108,000			0.76	\$	81,818			0.76	\$	81,818		0.76	\$	81,818
Electrification Items																	
1 Traction Power supply	Mile	\$	1,170,000			0.76	\$	886,364			0.76	\$	886,364		0.76	\$	886,364
2 Traction Power Distribution	Mile	\$	1,485,000			0.76	\$	1,125,000			0.76	\$	1,125,000		0.76	\$	1,125,000
Subtotal						\$	5,932,383			\$	7,571,194			\$	100,193,001		
Program Implementation Costs (per screening)						\$	1,512,758			\$	1,930,654			\$	25,549,215		
Program Implementation Costs																	
Contingencies (per screening) (25%)						\$	1,483,096			\$	1,892,798			\$	25,048,250		
Subtotal						\$	8,928,236			\$	11,394,647			\$	150,790,466		
Subtotal (Rounded)						\$	9,000,000			\$	11,000,000			\$	151,000,000		

COST ELEMENTS			UNIT	UNIT PRICE	Aerial (2 tracks)				Aerial (4 tracks)				At-Grade (2 tracks)				At-Grade (4 tracks)			
Subsection 5				Base: 2009 (3rd Quarter)	B				B				B				B			
					Start: 1605 + 00	Start: 1695 + 00	1.70 Miles		Start: 1605 + 00	Start: 1695 + 00	1.70 Miles		Start: 1605 + 00	End: 1695 + 00	1.70 Miles		Start: 1605 + 00	End: 1695 + 00	1.70 Miles	
Subsection Details						Quant.	Cost			Quant.	Cost			Quant.	Cost			Quant.	Cost	
Double Track At-Grade (Mile)					Start: 0 + 00	Start: 0 + 00	0.00 Miles		Start: 0 + 00	Start: 0 + 00	0.00 Miles		Start: 1605 + 00	End: 1695 + 00	1.70 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)					Start: 1605 + 00	End: 1695 + 00	1.70 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1605 + 00	End: 1695 + 00	1.70 Miles	
Four Track Elevated (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1605 + 00	End: 1695 + 00	1.70 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Trench (Mile)					Start: 0 + 00	0.00 Miles	0.00 Miles		Start: 0 + 00	0.00 Miles	0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Section - Total																				
1 Double Track Section - At Grade	Mile	\$	2,100,224				0.00 \$	-			0.00 \$	-			1.70 \$	3,579,927			0.00 \$	-
2 Double Track Section - On Structure	Mile	\$	4,700,160				1.70 \$	8,011,636			0.00 \$	-			0.00 \$	-			0.00 \$	-
3 Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160				0.00 \$	-			0.00 \$	-			0.00 \$	-			0.00 \$	-
4 Double Track Section - In Trench	Mile	\$	4,700,160				0.00 \$	-			0.00 \$	-			0.00 \$	-			0.00 \$	-
Four Track Section - Total																				
Four-track Section - At Grade	Mile	\$	4,200,448				0.00 \$	-			0.00 \$	-			0.00 \$	-			1.70 \$	7,159,855
Four-Track Section - On Structure	Mile	\$	9,400,320				0.00 \$	-			1.70 \$	16,023,273			0.00 \$	-			0.00 \$	-
Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320				0.00 \$	-			0.00 \$	-			0.00 \$	-			0.00 \$	-
Four-Track Section - In Trench	Mile	\$	9,400,320				0.00 \$	-			0.00 \$	-			0.00 \$	-			0.00 \$	-
Single Track - Total																				
5 Single Track Section - At Grade	Mile	\$	1,549,312				0.00 \$	-			0.00 \$	-			0.00 \$	-			0.00 \$	-
6 Single Track Section - On structure	Mile	\$	2,350,080				0.00 \$	-			0.00 \$	-			0.00 \$	-			0.00 \$	-
7 Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080				0.00 \$	-			0.00 \$	-			0.00 \$	-			0.00 \$	-
8 Single Track Section - In Trench	Mile	\$	2,350,080				0.00 \$	-			0.00 \$	-			0.00 \$	-			0.00 \$	-
9 Freight Double Track - At Grade	Mile	\$	2,839,552				0.00 \$	-			0.00 \$	-			0.00 \$	-			0.00 \$	-
10 Freight Single Track - At Grade	Mile	\$	1,549,312				0.00 \$	-			0.00 \$	-			0.00 \$	-			0.00 \$	-
Earthwork Items																				
1 Site Preparation - Undeveloped	Acre	\$	9,216				26.52 \$	244,408			26.52 \$	244,408			26.52 \$	244,408			26.52 \$	244,408
2 Total Cut	CY	\$	6.00				0.00 \$	-			0.00 \$	-			0.00 \$	-			0.00 \$	-
3 Total Fill	CY	\$	6.00				0.00 \$	-			0.00 \$	-			0.00 \$	-			0.00 \$	-
4 Borrow	CY	\$	13.00				0.00 \$	-			0.00 \$	-			0.00 \$	-			0.00 \$	-
5 Spoil	CY	\$	13.00				0.00 \$	-			0.00 \$	-			0.00 \$	-			0.00 \$	-
6 Landscape erosion Control	Acre	\$	6,144				26.52 \$	162,939			26.52 \$	162,939			26.52 \$	162,939			26.52 \$	162,939
7 Security Fencing (Both sides of ROW)	Mile	\$	144,384				0.00 \$	-			0.00 \$	-			1.70 \$	246,109			1.70 \$	246,109
8 Special Drainage Facilities	5% Earthwork						\$	20,367			\$	20,367			\$	32,673			\$	32,673
Structures, Tunnels, Walls																				
1 Standard Structure	Mile	\$	34,972,672				1.70 \$	59,612,509			1.70 \$	59,612,509			0.00 \$	-			0.00 \$	-
2 High Structure	Mile	\$	40,424,448				\$	-			\$	-			\$	-			\$	-
3 Long Span Structure	Mile	\$	61,919,232				\$	-			\$	-			\$	-			\$	-
4 Waterway Crossing - Primary	Mile	\$	85,342,208																	
5 Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408				\$	-			\$	-			\$	-			\$	-
6 Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264				\$	-			\$	-			\$	-			\$	-
7 Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312				\$	-			\$	-			\$	-			\$	-
8 Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896				\$	-			\$	-			\$	-			\$	-
9 Double Track Drill & Blast	Mile	\$	146,887,680				0.00 \$	-			0.00 \$	-			0.00 \$	-			0.00 \$	-
10 Double Track Mined (Soft Soil)	Mile	\$	79,200,000				\$	-			\$	-			\$	-			\$	-
Double Track TBM (<6 Miles)	Mile	\$	106,637,312																	
Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896																	
11 Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952				\$	-			\$	-			\$	-			\$	-
12 Crossovers	ea	\$	442,368				\$	-			\$	-			\$	-			\$	-
13 Cut & Cover Double Track Tunnel	Mile	\$	131,246,080				0.00 \$	-			0.00 \$	-			0.00 \$	-			0.00 \$	-
14 Trench Short	Mile	\$	78,843,904				0.00 \$	-			0.00 \$	-			0.00 \$	-			0.00 \$	-
15 Trench Long	Mile	\$	57,524,224				\$	-			\$	-			\$	-			\$	-
16 Mechanical & Electrical for Tunnels	Mile	\$	11,848,704				\$	-			\$	-			\$	-			\$	-
17 Retaining Walls	Mile	\$	8,613,888				0.00 \$	-			0.00 \$	-			0.00 \$	-			0.00 \$	-
18 Containment Walls	Mile	\$	5,907,456				0.00 \$	-			0.00 \$	-			0.00 \$	-			0.00 \$	-
19 Single Track Cut and Cover Subway	Mile	\$	131,246,080				\$	-			\$	-			\$	-			\$	-
Four Track Drill & Blast	Mile	\$	293,775,360				\$	-			\$	-			\$	-			\$	-
Four Track Mined (Soft Soil)	Mile	\$	158,400,000				\$	-			\$	-			\$	-			\$	-
Four Track TBM (<6 Miles)	Mile	\$	213,274,624																	
Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792																	
Four Track Cut & Cover Tunnel	Mile	\$	262,492,160				0.00 \$	-			0.00 \$	-			0.00 \$	-			0.00 \$	-
Grade Separations																				
1 Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352				\$	-			\$	-			\$	-			\$	-
Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528				0 \$	-			0 \$	-			0 \$	-			0 \$	-
2 Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680				0 \$	-			0 \$	-			0 \$	-			6 \$	16,558,080
3 Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568				\$	-			\$	-			6 \$	12,177,408			\$	-
4 Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520				\$	-			\$	-			\$	-			\$	-
5 Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216				\$	-			\$	-			\$	-			\$	-
Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816				\$	-			\$	-			\$	-			\$	-
6 Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328				\$	-			\$	-			\$	-			\$	-
7 Street Bridging HSR Trench	ea	\$	1,398,784				\$	-			\$	-			\$	-			\$	-
8 Minor Crossing Closures	ea	\$	87,040				\$	-			\$	-			\$	-			\$	-

COST ELEMENTS			UNIT	UNIT PRICE	Aerial (2 tracks)				Aerial (4 tracks)				At-Grade (2 tracks)				At-Grade (4 tracks)				
Subsection 5				Base: 2009 (3rd Quarter)	B				B				B				B				
					Start: 1605 + 00	Start: 1695 + 00	1.70 Miles		Start: 1605 + 00	Start: 1695 + 00	1.70 Miles		Start: 1605 + 00	End: 1695 + 00	1.70 Miles		Start: 1605 + 00	End: 1695 + 00	1.70 Miles		
Subsection Details							Quant.	Cost			Quant.	Cost			Quant.	Cost			Quant.	Cost	
Double Track At-Grade (Mile)					Start: 0 + 00	Start: 0 + 00	0.00 Miles		Start: 0 + 00	Start: 0 + 00	0.00 Miles		Start: 1605 + 00	End: 1695 + 00	1.70 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
Double Track Elevated (Mile)					Start: 1605 + 00	End: 1695 + 00	1.70 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1605 + 00	End: 1695 + 00	1.70 Miles		
Four Track Elevated (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1605 + 00	End: 1695 + 00	1.70 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Four Track Trench (Mile)					Start: 0 + 00	0.00 Miles	0.00 Miles		Start: 0 + 00	0.00 Miles	0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
1	Building Items																				
1	Intermediate Passenger Stations	Each	\$	-				\$	-			\$	-			\$	-			\$	-
2	Terminal Passenger Stations	Each	\$	-				\$	-			\$	-			\$	-			\$	-
	Caltrain Passenger Station - At-Grade	Each	\$	15,000,000				\$	-			\$	-			\$	-			2	\$ 30,000,000
	Caltrain Passenger Station - On Structure	Each	\$	15,000,000		2	\$	30,000,000			2	\$	30,000,000			\$	-			\$	-
	Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000				\$	-			\$	-			\$	-			\$	-
	Caltrain Passenger Station - In Trench	Each	\$	15,000,000				\$	-			\$	-			\$	-			\$	-
3	Maintenance Facility	Each	\$	123,921,884				\$	-			\$	-			\$	-			\$	-
4	Parking - Structures	space	\$	-				\$	-			\$	-			\$	-			\$	-
5	Parking - At Grade	space	\$	-				\$	-			\$	-			\$	-			\$	-
Rail & Utility Relocation																					
1	Single Track Relocation (Temporary)	Mile	\$	2,000,896				\$	-			\$	-			\$	-			\$	-
2	Single Track Relocation (Permanent)	Mile	\$	2,000,896				\$	-			\$	-			\$	-			\$	-
3	Single Track Removal	Mile	\$	130,048				\$	-			\$	-			\$	-			\$	-
4	Major Utility Relocations - Dense Urban	Mile	\$	1,548,288				\$	-			\$	-			\$	-			\$	-
5	Major Utility Relocations - Urban	Mile	\$	1,084,416				\$	-			\$	-			\$	-			\$	-
6	Major Utility Relocations - Dense Suburban	Mile	\$	775,168				\$	-			\$	-			\$	-			\$	-
7	Major Utility Relocations - Suburban	Mile	\$	464,896				\$	-			\$	-			\$	-			\$	-
8	Major Utility Relocations - Undeveloped	Mile	\$	30,720				\$	-			\$	-			\$	-			\$	-
ROW (Not Included)																					
ROW required for each segment																					
1	Dense Urban	Acre	\$	2,786,321				\$	-			\$	-			\$	-			\$	-
2	Urban	Acre	\$	1,371,510				\$	-			\$	-			\$	-			\$	-
3	Dense Suburban	Acre	\$	908,134				\$	-			\$	-			\$	-			\$	-
4	Suburban	Acre	\$	208,418				\$	-			\$	-			\$	-			\$	-
5	Undeveloped	Acre	\$	3,642				\$	-			\$	-			\$	-			\$	-
ROW required for Temp. Construction Easement								\$	-			\$	-			\$	-			\$	-
1	Dense Urban	Acre					B				B										
2	Urban	Acre					\$	-			\$	-			\$	-			\$	-	
3	Dense Suburban	Acre					\$	-			\$	-			\$	-			\$	-	
4	Suburban	Acre					\$	-			\$	-			\$	-			\$	-	
5	Undeveloped	Acre					\$	-			\$	-			\$	-			\$	-	
Right-of-Way Required for Stations, Maintenance & Parking Facilities																					
6	Dense Urban	Acre	\$	2,786,321				\$	-			\$	-			\$	-			\$	-
7	Urban	Acre	\$	1,371,510				\$	-			\$	-			\$	-			\$	-
8	Dense Suburban	Acre	\$	908,134				\$	-			\$	-			\$	-			\$	-
9	Suburban	Acre	\$	208,418				\$	-			\$	-			\$	-			\$	-
10	Undeveloped	Acre	\$	3,642				\$	-			\$	-			\$	-			\$	-
Environmental Mitigation = 3% Line Costs								\$	2,941,556			\$	3,181,905			\$	493,304			\$	1,632,122
System Elements																					
1	Signaling (ATC)	Mile	\$	2,070,000		1.70	\$	3,528,409			1.70	\$	3,528,409		1.70	\$	3,528,409		1.70	\$	3,528,409
2	Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000		1.70	\$	920,455			1.70	\$	920,455		1.70	\$	920,455		1.70	\$	920,455
3	Wayside Protection System	Mile	\$	108,000		1.70	\$	184,091			1.70	\$	184,091		1.70	\$	184,091		1.70	\$	184,091
Electrification Items																					
1	Traction Power supply	Mile	\$	1,170,000		1.70	\$	1,994,318			1.70	\$	1,994,318		1.70	\$	1,994,318		1.70	\$	1,994,318
2	Traction Power Distribution	Mile	\$	1,485,000		1.70	\$	2,531,250			1.70	\$	2,531,250		1.70	\$	2,531,250		1.70	\$	2,531,250
Subtotal							\$	110,151,939			\$	118,403,924			\$	26,095,291			\$	65,194,708	
Program Implementation Costs (per screening)							\$	28,088,744			\$	30,193,001			\$	6,654,299			\$	16,624,651	
Program Implementation Costs																					
Contingencies (per screening) (25%)							\$	27,537,985			\$	29,600,981			\$	6,523,823			\$	16,298,677	
Subtotal							\$	165,778,668			\$	178,197,906			\$	39,273,413			\$	98,118,036	
Subtotal (Rounded)							\$ 166,000,000				\$ 178,000,000				\$ 39,000,000				\$ 98,000,000		

COST ELEMENTS			UNIT	UNIT PRICE	Open Trench (2 tracks)				Open Trench (4 tracks)				Covered Trench (2 tracks)				Covered Trench (4 tracks)			
Subsection 5				Base: 2009 (3rd Quarter)	B				B				B				B			
					Start: 1605 + 00	Start: 1695 + 00	1.70 Miles		Start: 1605 + 00	Start: 1695 + 00	1.70 Miles		Start: 1605 + 00	Start: 1695 + 00	1.70 Miles		Start: 1605 + 00	Start: 1695 + 00	1.70 Miles	
Subsection Details							Quant.	Cost			Quant.	Cost			Quant.	Cost			Quant.	Cost
Double Track At-Grade (Mile)					Start: 0 + 00	Start: 0 + 00	0.00 Miles		Start: 0 + 00	Start: 0 + 00	0.00 Miles		Start: 0 + 00	Start: 0 + 00	0.00 Miles		Start: 0 + 00	Start: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1605 + 00	End: 1695 + 00	1.70 Miles		Start: 0 + 00		0.00 Miles	
Double Track Trench (Mile)					Start: 1605 + 00	End: 1695 + 00	1.70 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1605 + 00	End: 1695 + 00	1.70 Miles	
Four Track Trench (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1605 + 00	End: 1695 + 00	1.70 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
1	Double Track Section - Total																			
2	Double Track Section - At Grade	Mile	\$	2,100,224			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
3	Double Track Section - On Structure	Mile	\$	4,700,160			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
4	Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160			0.00	\$ -			0.00	\$ -			1.70	\$ 8,011,636			0.00	\$ -
5	Double Track Section - In Trench	Mile	\$	4,700,160			1.70	\$ 8,011,636			0.00	\$ -			0.00	\$ -			0.00	\$ -
Four Track Section - Total																				
1	Four-track Section - At Grade	Mile	\$	4,200,448			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
2	Four-Track Section - On Structure	Mile	\$	9,400,320			0	\$ -			0	\$ -			0	\$ -			0	\$ -
3	Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320			0	\$ -			0	\$ -			0.00	\$ -			1.70	\$ 16,023,273
4	Four-Track Section - In Trench	Mile	\$	9,400,320			0.00	\$ -			1.70	\$ 16,023,273			0	\$ -			0	\$ -
Single Track - Total																				
5	Single Track Section - At Grade	Mile	\$	1,549,312			0	\$ -			0	\$ -			0	\$ -			0	\$ -
6	Single Track Section - On structure	Mile	\$	2,350,080			0	\$ -			0	\$ -			0	\$ -			0	\$ -
7	Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080			0	\$ -			0	\$ -			0	\$ -			0	\$ -
8	Single Track Section - In Trench	Mile	\$	2,350,080			0	\$ -			0	\$ -			0	\$ -			0	\$ -
9	Freight Double Track - At Grade	Mile	\$	2,839,552			0	\$ -			0	\$ -			0	\$ -			0	\$ -
10	Freight Single Track - At Grade	Mile	\$	1,549,312			0	\$ -			0	\$ -			0	\$ -			0	\$ -
Earthwork Items																				
1	Site Preparation - Undeveloped	Acre	\$	9,216			22.73	\$ 209,455			22.73	\$ 209,455			22.73	\$ 209,455			22.73	\$ 209,455
2	Total Cut	CY	\$	6.00			733333.33	\$ 4,400,000			733333.33	\$ 4,400,000			733333.33	\$ 4,400,000			733333.33	\$ 4,400,000
3	Total Fill	CY	\$	6.00			0.00	\$ -			0.00	\$ -			\$ -	\$ -			\$ -	\$ -
4	Borrow	CY	\$	13.00			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
5	Spoil	CY	\$	13.00			733333.33	\$ 9,533,333			733333.33	\$ 9,533,333			733333.33	\$ 9,533,333			733333.33	\$ 9,533,333
6	Landscape erosion Control	Acre	\$	6,144			22.73	\$ 139,636			22.73	\$ 139,636			22.73	\$ 139,636			22.73	\$ 139,636
7	Security Fencing (Both sides of ROW)	Mile	\$	144,384			1.70	\$ 246,109			1.70	\$ 246,109			0.00	\$ -			0.00	\$ -
8	Special Drainage Facilities	5% Earthwork						\$ 726,427				\$ 726,427			\$ 714,121	\$ 714,121			\$ 714,121	\$ 714,121
Structures, Tunnels, Walls																				
1	Standard Structure	Mile	\$	34,972,672			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
2	High Structure	Mile	\$	40,424,448				\$ -				\$ -				\$ -				\$ -
3	Long Span Structure	Mile	\$	61,919,232				\$ -				\$ -				\$ -				\$ -
4	Waterway Crossing - Primary	Mile	\$	85,342,208				\$ -				\$ -				\$ -				\$ -
5	Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408				\$ -				\$ -				\$ -				\$ -
6	Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264				\$ -				\$ -				\$ -				\$ -
7	Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312				\$ -				\$ -				\$ -				\$ -
8	Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896				\$ -				\$ -				\$ -				\$ -
9	Double Track Drill & Blast	Mile	\$	146,887,680			0.00	\$ -			0.00	\$ -			0.00	\$ -			0.00	\$ -
10	Double Track Mined (Soft Soil)	Mile	\$	79,200,000				\$ -				\$ -				\$ -				\$ -
	Double Track TBM (<6 Miles)	Mile	\$	106,637,312																
	Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896																
11	Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952				\$ -				\$ -				\$ -				\$ -
12	Crossovers	ea	\$	442,368				\$ -				\$ -				\$ -				\$ -
13	Cut & Cover Double Track Tunnel	Mile	\$	131,246,080			0.00	\$ -			0.00	\$ -			1.70	\$ 223,714,909			0.00	\$ -
14	Trench Short	Mile	\$	78,843,904			1.70	\$ 134,393,018			1.70	\$ 134,393,018			0.00	\$ -			0.00	\$ -
15	Trench Long	Mile	\$	57,524,224				\$ -				\$ -				\$ -				\$ -
16	Mechanical & Electrical for Tunnels	Mile	\$	11,848,704			0.00	\$ -			0.00	\$ -			1.70	\$ 20,196,655			1.70	\$ 20,196,655
17	Retaining Walls	Mile	\$	8,613,888			1.70	\$ 14,682,764			1.70	\$ 14,682,764			0.00	\$ -			0.00	\$ -
18	Containment Walls	Mile	\$	5,907,456			1.70	\$ 10,069,527			1.70	\$ 10,069,527			0.00	\$ -			0.00	\$ -
19	Single Track Cut and Cover Subway	Mile	\$	131,246,080				\$ -				\$ -				\$ -				\$ -
	Four Track Drill & Blast	Mile	\$	293,775,360				\$ -				\$ -				\$ -			0.00	\$ -
	Four Track Mined (Soft Soil)	Mile	\$	158,400,000				\$ -				\$ -				\$ -				\$ -
	Four Track TBM (<6 Miles)	Mile	\$	213,274,624																
	Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792																
	Four Track Cut & Cover Tunnel	Mile	\$	262,492,160			0.00	\$ -			0.00	\$ -			0.00	\$ -			1.70	\$ 447,429,818
Grade Separations																				
1	Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352				\$ -				\$ -				\$ -				\$ -
	Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528				\$ -				\$ -				\$ -				\$ -
2	Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680			0	\$ -			0	\$ -				\$ -				\$ -
3	Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568				\$ -				\$ -				\$ -				\$ -
4	Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520																

COST ELEMENTS			UNIT	UNIT PRICE	Open Trench (2 tracks)				Open Trench (4 tracks)				Covered Trench (2 tracks)				Covered Trench (4 tracks)					
Subsection 5				Base: 2009 (3rd Quarter)	B				B				B				B					
					Start: 1605 + 00	Start: 1695 + 00	1.70 Miles		Start: 1605 + 00	Start: 1695 + 00	1.70 Miles		Start: 1605 + 00	Start: 1695 + 00	1.70 Miles		Start: 1605 + 00	Start: 1695 + 00	1.70 Miles			
Subsection Details							Quant.	Cost			Quant.	Cost			Quant.	Cost			Quant.	Cost		
Double Track At-Grade (Mile)					Start: 0 + 00	Start: 0 + 00	0.00 Miles		Start: 0 + 00	Start: 0 + 00	0.00 Miles		Start: 0 + 00	Start: 0 + 00	0.00 Miles		Start: 0 + 00	Start: 0 + 00	0.00 Miles			
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1605 + 00	End: 1695 + 00	1.70 Miles		Start: 0 + 00		0.00 Miles			
Double Track Trench (Mile)					Start: 1605 + 00	End: 1695 + 00	1.70 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1605 + 00	End: 1695 + 00	1.70 Miles			
Four Track Trench (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1605 + 00	End: 1695 + 00	1.70 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Building Items																						
1 Intermediate Passenger Stations	Each	\$	-				\$	-			\$	-			\$	-			\$	-		
2 Terminal Passenger Stations	Each	\$	-				\$	-			\$	-			\$	-			\$	-		
Caltrain Passenger Station - At-Grade	Each	\$	15,000,000				\$	-			\$	-			\$	-			\$	-		
Caltrain Passenger Station - On Structure	Each	\$	15,000,000				\$	-			\$	-			\$	-			\$	-		
Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000				\$	-			\$	-			\$	-			\$	-		
Caltrain Passenger Station - In Trench	Each	\$	15,000,000	2		30,000,000			2		30,000,000		2		30,000,000		2		30,000,000			
3 Maintenance Facility	Each	\$	123,921,884				\$	-			\$	-			\$	-			\$	-		
4 Parking - Structures	space	\$	-				\$	-			\$	-			\$	-			\$	-		
5 Parking - At Grade	space	\$	-				\$	-			\$	-			\$	-			\$	-		
Rail & Utility Relocation																						
1 Single Track Relocation (Temporary)	Mile	\$	2,000,896				\$	-			\$	-			\$	-			\$	-		
2 Single Track Relocation (Permanent)	Mile	\$	2,000,896				\$	-			\$	-			\$	-			\$	-		
3 Single Track Removal	Mile	\$	130,048				\$	-			\$	-			\$	-			\$	-		
4 Major Utility Relocations - Dense Urban	Mile	\$	1,548,288				\$	-			\$	-			\$	-			\$	-		
5 Major Utility Relocations - Urban	Mile	\$	1,084,416				\$	-			\$	-			\$	-			\$	-		
6 Major Utility Relocations - Dense Suburban	Mile	\$	775,168				\$	-			\$	-			\$	-			\$	-		
7 Major Utility Relocations - Suburban	Mile	\$	464,896				\$	-			\$	-			\$	-			\$	-		
8 Major Utility Relocations - Undeveloped	Mile	\$	30,720				\$	-			\$	-			\$	-			\$	-		
ROW (Not Included)																						
ROW required for each segment																						
1 Dense Urban	Acre	\$	2,786,321				\$	-			\$	-			\$	-			\$	-		
2 Urban	Acre	\$	1,371,510				\$	-			\$	-			\$	-			\$	-		
3 Dense Suburban	Acre	\$	908,134				\$	-			\$	-			\$	-			\$	-		
4 Suburban	Acre	\$	208,418				\$	-			\$	-			\$	-			\$	-		
5 Undeveloped	Acre	\$	3,642				\$	-			\$	-			\$	-			\$	-		
ROW required for Temp. Construction Easement								\$	-			\$	-			\$	-			\$	-	
1 Dense Urban	Acre						\$	-			\$	-			\$	-			\$	-		
2 Urban	Acre						\$	-			\$	-			\$	-			\$	-		
3 Dense Suburban	Acre						\$	-			\$	-			\$	-			\$	-		
4 Suburban	Acre						\$	-			\$	-			\$	-			\$	-		
5 Undeveloped	Acre						\$	-			\$	-			\$	-			\$	-		
Right-of-Way Required for Stations, Maintenance & Parking Facilities																						
6 Dense Urban	Acre	\$	2,786,321				\$	-			\$	-			\$	-			\$	-		
7 Urban	Acre	\$	1,371,510				\$	-			\$	-			\$	-			\$	-		
8 Dense Suburban	Acre	\$	908,134				\$	-			\$	-			\$	-			\$	-		
9 Suburban	Acre	\$	208,418				\$	-			\$	-			\$	-			\$	-		
10 Undeveloped	Acre	\$	3,642				\$	-			\$	-			\$	-			\$	-		
Environmental Mitigation = 3% Line Costs								\$	6,372,357			\$	6,612,706			\$	8,907,592			\$	15,859,389	
System Elements																						
1 Signaling (ATC)	Mile	\$	2,070,000			1.70	\$	3,528,409			1.70	\$	3,528,409			1.70	\$	3,528,409		1.70	\$	3,528,409
2 Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			1.70	\$	920,455			1.70	\$	920,455			1.70	\$	920,455		1.70	\$	920,455
3 Wayside Protection System	Mile	\$	108,000			1.70	\$	184,091			1.70	\$	184,091			1.70	\$	184,091		1.70	\$	184,091
Electrification Items																						
1 Traction Power supply	Mile	\$	1,170,000			1.70	\$	1,994,318			1.70	\$	1,994,318			1.70	\$	1,994,318		1.70	\$	1,994,318
2 Traction Power Distribution	Mile	\$	1,485,000			1.70	\$	2,531,250			1.70	\$	2,531,250			1.70	\$	2,531,250		1.70	\$	2,531,250
Subtotal								\$	227,942,785			\$	236,194,771			\$	314,985,861			\$	553,664,202	
Program Implementation Costs (per screening)								\$	58,125,410			\$	60,229,667			\$	80,321,394			\$	141,184,372	
Program Implementation Costs																						
Contingencies (per screening) (25%)								\$	56,985,696			\$	59,048,693			\$	78,746,465			\$	138,416,051	
Subtotal								\$	343,053,892			\$	355,473,130			\$	474,053,720			\$	833,264,625	
Subtotal (Rounded)								\$	343,000,000			\$	355,000,000			\$	474,000,000			\$	833,000,000	

COST ELEMENTS		UNIT	UNIT PRICE	Tunnel (HST only)			
Subsection 5			Base: 2009 (3rd Quarter)	B			
				Start: 1605 + 00	Start: 1695 + 00	1.70 Miles	
Subsection Details						Quant.	Cost
Double Track At-Grade (Mile)				Start: 0 + 00	Start: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Tunnel (Mile)				Start: 1605 + 00	End: 1695 + 00	1.70 Miles	
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Elevated (Mile)				Start: 0 + 00		0.00 Miles	
Four Track Tunnel (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Trench (Mile)				Start: 0 + 00		0.00 Miles	
Double Track Section - Total							
1 Double Track Section - At Grade	Mile	\$	2,100,224			0.00 \$	-
2 Double Track Section - On Structure	Mile	\$	4,700,160			0.00 \$	-
3 Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160			1.70 Miles \$	8,011,636
4 Double Track Section - In Trench	Mile	\$	4,700,160			0.00 \$	-
Four Track Section - Total							
Four-track Section - At Grade	Mile	\$	4,200,448			0.00 \$	-
Four-Track Section - On Structure	Mile	\$	9,400,320			0 \$	-
Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320			0.00 Miles \$	-
Four-Track Section - In Trench	Mile	\$	9,400,320			0 \$	-
Single Track - Total							
5 Single Track Section - At Grade	Mile	\$	1,549,312			0 \$	-
6 Single Track Section - On structure	Mile	\$	2,350,080			0 \$	-
7 Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080			0 \$	-
8 Single Track Section - In Trench	Mile	\$	2,350,080			0 \$	-
9 Freight Double Track - At Grade	Mile	\$	2,839,552			0 \$	-
10 Freight Single Track - At Grade	Mile	\$	1,549,312			0 \$	-
Earthwork Items							
1 Site Preparation - Undeveloped	Acre	\$	9,216			0.00 \$	-
2 Total Cut	CY	\$	6.00			0.00 \$	-
3 Total Fill	CY	\$	6.00			0.00 \$	-
4 Borrow	CY	\$	13.00			0.00 \$	-
5 Spoil	CY	\$	13.00			0.00 \$	-
6 Landscape erosion Control	Acre	\$	6,144			0.00 \$	-
7 Security Fencing (Both sides of ROW)	Mile	\$	144,384			0.00 \$	-
8 Special Drainage Facilities	5% Earthwork					\$	-
Structures, Tunnels, Walls							
1 Standard Structure	Mile	\$	34,972,672			0.00 \$	-
2 High Structure	Mile	\$	40,424,448			\$	-
3 Long Span Structure	Mile	\$	61,919,232			\$	-
4 Waterway Crossing - Primary	Mile	\$	85,342,208			\$	-
5 Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408			\$	-
6 Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264			\$	-
7 Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312			\$	-
8 Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896			\$	-
9 Double Track Drill & Blast	Mile	\$	146,887,680			0.00 \$	-
10 Double Track Mined (Soft Soil)	Mile	\$	79,200,000			0.00 \$	-
Double Track TBM (<6 Miles)	Mile	\$	106,637,312			0.00 \$	-
Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896			1.70 \$	301,228,800
11 Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952			\$	-
12 Crossovers	ea	\$	442,368			\$	-
13 Cut & Cover Double Track Tunnel	Mile	\$	131,246,080			0.00 \$	-
14 Trench Short	Mile	\$	78,843,904			0.00 \$	-
15 Trench Long	Mile	\$	57,524,224			\$	-
16 Mechanical & Electrical for Tunnels	Mile	\$	11,848,704			1.70 \$	20,196,655
17 Retaining Walls	Mile	\$	8,613,888			0.00 \$	-
18 Containment Walls	Mile	\$	5,907,456			0.00 \$	-
19 Single Track Cut and Cover Subway	Mile	\$	131,246,080			\$	-
Four Track Drill & Blast	Mile	\$	293,775,360			\$	-
Four Track Mined (Soft Soil)	Mile	\$	158,400,000			0.00 \$	-
Four Track TBM (<6 Miles)	Mile	\$	213,274,624			0.00 \$	-
Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792			\$	-
Four Track Cut & Cover Tunnel	Mile	\$	262,492,160			0.00 \$	-
Grade Separations							
1 Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352			\$	-
Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528			\$	-
2 Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680			0 \$	-
3 Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568			\$	-
4 Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520			\$	-
5 Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216			\$	-
Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816			\$	-
6 Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328			\$	-
7 Street Bridging HSR Trench	ea	\$	1,398,784			0 \$	-
8 Minor Crossing Closures	ea	\$	87,040			0 \$	-

COST ELEMENTS		UNIT	UNIT PRICE	Tunnel (HST only)		
Subsection 5			Base: 2009 (3rd Quarter)	B		
				Start: 1605 + 00	Start: 1695 + 00	1.70 Miles
Subsection Details					Quant.	Cost
Double Track At-Grade (Mile)				Start: 0 + 00	Start: 0 + 00	0.00 Miles
Double Track Elevated (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles
Double Track Tunnel (Mile)				Start: 1605 + 00	End: 1695 + 00	1.70 Miles
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles
Four Track Elevated (Mile)				Start: 0 + 00		0.00 Miles
Four Track Tunnel (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles
Four Track Trench (Mile)				Start: 0 + 00		0.00 Miles
Building Items						
1 Intermediate Passenger Stations	Each	\$ -				\$ -
2 Terminal Passenger Stations	Each	\$ -				\$ -
Caltrain Passenger Station - At-Grade	Each	\$15,000,000				\$ -
Caltrain Passenger Station - On Structure	Each	\$15,000,000				0 \$ -
Caltrain Passenger Station - In Tunnel or Subway	Each	\$15,000,000				0 \$ -
Caltrain Passenger Station - In Trench	Each	\$15,000,000				\$ -
3 Maintenance Facility	Each	\$ 123,921,884				\$ -
4 Parking - Structures	space	\$ -				\$ -
5 Parking - At Grade	space	\$ -				\$ -
Rail & Utility Relocation						
1 Single Track Relocation (Temporary)	Mile	\$ 2,000,896				\$ -
2 Single Track Relocation (Permanent)	Mile	\$ 2,000,896				\$ -
3 Single Track Removal	Mile	\$ 130,048				\$ -
4 Major Utility Relocations - Dense Urban	Mile	\$ 1,548,288				\$ -
5 Major Utility Relocations - Urban	Mile	\$ 1,084,416				\$ -
6 Major Utility Relocations - Dense Suburban	Mile	\$ 775,168				\$ -
7 Major Utility Relocations - Suburban	Mile	\$ 464,896				\$ -
8 Major Utility Relocations - Undeveloped	Mile	\$ 30,720				\$ -
ROW (Not Included)						
ROW required for each segment						
1 Dense Urban	Acre	\$ 2,786,321				\$ -
2 Urban	Acre	\$ 1,371,510				\$ -
3 Dense Suburban	Acre	\$ 908,134				\$ -
4 Suburban	Acre	\$ 208,418				\$ -
5 Undeveloped	Acre	\$ 3,642				\$ -
ROW required for Temp. Construction Easement						\$ -
1 Dense Urban	Acre					\$ -
2 Urban	Acre					\$ -
3 Dense Suburban	Acre					\$ -
4 Suburban	Acre					\$ -
5 Undeveloped	Acre					\$ -
Right-of-Way Required for Stations, Maintenance & Parking Facilities						
6 Dense Urban	Acre	\$ 2,786,321				\$ -
7 Urban	Acre	\$ 1,371,510				\$ -
8 Dense Suburban	Acre	\$ 908,134				\$ -
9 Suburban	Acre	\$ 208,418				\$ -
10 Undeveloped	Acre	\$ 3,642				\$ -
Environmental Mitigation = 3% Line Costs						\$ 9,883,113
System Elements						
1 Signaling (ATC)	Mile	\$ 2,070,000			1.70	\$ 3,528,409
2 Communications (w/ Fiber Optic Backbone)	Mile	\$ 540,000			1.70	\$ 920,455
3 Wayside Protection System	Mile	\$ 108,000			1.70	\$ 184,091
Electrification Items						
1 Traction Power supply	Mile	\$ 1,170,000			1.70	\$ 1,994,318
2 Traction Power Distribution	Mile	\$ 1,485,000			1.70	\$ 2,531,250
Subtotal						\$ 348,478,726
Program Implementation Costs (per screening)						\$ 88,862,075
Program Implementation Costs						
Contingencies (per screening) (25%)						\$ 87,119,682
Subtotal						\$ 524,460,483
Subtotal (Rounded)						\$ 524,000,000

COST ELEMENTS			UNIT	UNIT PRICE	At-Grade (2 tracks)			At-Grade (4 tracks)			Covered Trench (2 tracks)			Covered Trench (4 tracks)						
Subsection 5			Base: 2009 (3rd Quarter)	C			C			C			C							
				Start: 1695 + 00	End: 1765 + 00	1.33 Miles	Start: 1695 + 00	End: 1765 + 00	1.33 Miles	Start: 1695 + 00	Start: 1765 + 00	1.33 Miles	Start: 1695 + 00	Start: 1765 + 00	1.33 Miles					
Subsection Details					Quant.	Cost		Quant.	Cost		Quant.	Cost		Quant.	Cost					
Double Track At-Grade (Mile)				Start: 1695 + 00	End: 1765 + 00	1.33 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	Start: 0 + 00	0.00 Miles		Start: 0 + 00	Start: 0 + 00	0.00 Miles		
Double Track Elevated (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Double Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1695 + 00	End: 1765 + 00	1.33 Miles		Start: 0 + 00		0.00 Miles		
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1695 + 00	End: 1765 + 00	1.33 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
Four Track Elevated (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Four Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1695 + 00	End: 1765 + 00	1.33 Miles		
Four Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
1	Double Track Section - Total																			
1	Double Track Section - At Grade	Mile	\$	2,100,224		1.33	\$	2,784,388		0.00	\$	-		0.00	\$	-		0.00	\$	-
2	Double Track Section - On Structure	Mile	\$	4,700,160		0.00	\$	-		0.00	\$	-		0.00	\$	-		0.00	\$	-
3	Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160		0.00	\$	-		0.00	\$	-		1.33	\$	6,231,273		0.00	\$	-
4	Double Track Section - In Trench	Mile	\$	4,700,160		0.00	\$	-		0.00	\$	-		0.00	\$	-		0.00	\$	-
Four Track Section - Total																				
	Four-track Section - At Grade	Mile	\$	4,200,448		0.00	\$	-		1.33	\$	5,568,776		0.00	\$	-		0.00	\$	-
	Four-Track Section - On Structure	Mile	\$	9,400,320		0.00	\$	-		0.00	\$	-		0	\$	-		0	\$	-
	Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320		0.00	\$	-		0.00	\$	-		0.00	\$	-		1.33	\$	12,462,545
	Four-Track Section - In Trench	Mile	\$	9,400,320		0.00	\$	-		0.00	\$	-		0	\$	-		0	\$	-
Single Track - Total																				
5	Single Track Section - At Grade	Mile	\$	1,549,312		0.00	\$	-		0.00	\$	-		0	\$	-		0	\$	-
6	Single Track Section - On structure	Mile	\$	2,350,080		0.00	\$	-		0.00	\$	-		0	\$	-		0	\$	-
7	Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080		0.00	\$	-		0.00	\$	-		0	\$	-		0	\$	-
8	Single Track Section - In Trench	Mile	\$	2,350,080		0.00	\$	-		0.00	\$	-		0	\$	-		0	\$	-
9	Freight Double Track - At Grade	Mile	\$	2,839,552		0.00	\$	-		0.00	\$	-		0	\$	-		0	\$	-
10	Freight Single Track - At Grade	Mile	\$	1,549,312		0.00	\$	-		0.00	\$	-		0	\$	-		0	\$	-
Earthwork Items																				
1	Site Preparation - Undeveloped	Acre	\$	9,216		13.89	\$	128,010		13.89	\$	128,010		17.68	\$	162,909		17.68	\$	162,909
2	Total Cut	CY	\$	6.00		0.00	\$	-		0.00	\$	-		570370.37	\$	3,422,222		570370.37	\$	3,422,222
3	Total Fill	CY	\$	6.00		0.00	\$	-		0.00	\$	-			\$	-			\$	-
4	Borrow	CY	\$	13.00		0.00	\$	-		0.00	\$	-		0.00	\$	-		0.00	\$	-
5	Spoil	CY	\$	13.00		0.00	\$	-		0.00	\$	-		570370.37	\$	7,414,815		570370.37	\$	7,414,815
6	Landscape erosion Control	Acre	\$	6,144		13.89	\$	85,340		13.89	\$	85,340		17.68	\$	108,606		17.68	\$	108,606
7	Security Fencing (Both sides of ROW)	Mile	\$	144,384		1.33	\$	191,418		1.33	\$	191,418		0.00	\$	-		0.00	\$	-
8	Special Drainage Facilities	5% Earthwork					\$	20,238			\$	20,238			\$	555,428			\$	555,428
Structures, Tunnels, Walls																				
1	Standard Structure	Mile	\$	34,972,672		0.00	\$	-		0.00	\$	-		0.00	\$	-		0.00	\$	-
2	High Structure	Mile	\$	40,424,448			\$	-			\$	-			\$	-			\$	-
3	Long Span Structure	Mile	\$	61,919,232			\$	-			\$	-			\$	-			\$	-
4	Waterway Crossing - Primary	Mile	\$	85,342,208			\$	-			\$	-			\$	-			\$	-
5	Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408			\$	-			\$	-			\$	-			\$	-
6	Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264			\$	-			\$	-			\$	-			\$	-
7	Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312			\$	-			\$	-			\$	-			\$	-
8	Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896			\$	-			\$	-			\$	-			\$	-
9	Double Track Drill & Blast	Mile	\$	146,887,680		0.00	\$	-		0.00	\$	-		1.33	\$	194,737,455		0.00	\$	-
10	Double Track Mined (Soft Soil)	Mile	\$	79,200,000			\$	-			\$	-			\$	-			\$	-
	Double Track TBM (<6 Miles)	Mile	\$	106,637,312																
	Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896																
11	Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952			\$	-			\$	-			\$	-			\$	-
12	Crossovers	ea	\$	442,368			\$	-			\$	-			\$	-			\$	-
13	Cut & Cover Double Track Tunnel	Mile	\$	131,246,080		0.00	\$	-		0.00	\$	-		1.33	\$	174,000,485		0.00	\$	-
14	Trench Short	Mile	\$	78,843,904		0.00	\$	-		0.00	\$	-		0.00	\$	-		0.00	\$	-
15	Trench Long	Mile	\$	57,524,224			\$	-			\$	-			\$	-			\$	-
16	Mechanical & Electrical for Tunnels	Mile	\$	11,848,704			\$	-			\$	-			\$	-			\$	-
17	Retaining Walls	Mile	\$	8,613,888		0.00	\$	-		0.00	\$	-		0.00	\$	-		0.00	\$	-
18	Containment Walls	Mile	\$	5,907,456		0.00	\$	-		0.00	\$	-		0.00	\$	-		0.00	\$	-
19	Single Track Cut and Cover Subway	Mile	\$	131,246,080			\$	-			\$	-			\$	-			\$	-
	Four Track Drill & Blast	Mile	\$	293,775,360			\$	-			\$	-			\$	-		0.00	\$	-
	Four Track Mined (Soft Soil)	Mile	\$	158,400,000			\$	-			\$	-			\$	-			\$	-
	Four Track TBM (<6 Miles)	Mile	\$	213,274,624																
	Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792																
	Four Track Cut & Cover Tunnel	Mile	\$	262,492,160		0.00	\$	-		0.00	\$	-		0.00	\$	-		1.33	\$	348,000,970
Grade Separations																				
1	Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352			\$	-			\$	-			\$	-			\$	-
	Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528		0	\$	-		0	\$	-			\$	-			\$	-
2	Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680		0	\$	-		0	\$	-			\$	-			\$	-
3	Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568			\$	-			\$	-			\$	-			\$	-
4	Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520			\$	-			\$	-			\$	-			\$	-
5	Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216			\$	-			\$	-			\$	-			\$	-
	Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816			\$	-			\$	-			\$	-			\$	-
6	Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328			\$	-												

COST ELEMENTS			UNIT	UNIT PRICE	At-Grade (2 tracks)				At-Grade (4 tracks)				Covered Trench (2 tracks)				Covered Trench (4 tracks)					
Subsection 5			Base: 2009 (3rd Quarter)		C				C				C				C					
					Start: 1695 + 00		End: 1765 + 00		1.33 Miles		Start: 1695 + 00		End: 1765 + 00		1.33 Miles		Start: 1695 + 00		Start: 1765 + 00		1.33 Miles	
Subsection Details							Quant.	Cost			Quant.	Cost			Quant.	Cost			Quant.	Cost		
Double Track At-Grade (Mile)					Start: 1695 + 00	End: 1765 + 00	1.33 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	Start: 0 + 00	0.00 Miles		Start: 0 + 00	Start: 0 + 00	0.00 Miles			
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1695 + 00	End: 1765 + 00	1.33 Miles		Start: 0 + 00		0.00 Miles			
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1695 + 00	End: 1765 + 00	1.33 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1695 + 00	End: 1765 + 00	1.33 Miles			
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
1 Building Items			Each	\$	-			\$	-			\$	-			\$	-			\$	-	
2 Terminal Passenger Stations			Each	\$	-			\$	-			\$	-			\$	-			\$	-	
Caltrain Passenger Station - At-Grade			Each	\$	15,000,000			\$	-			\$	-			\$	-			\$	-	
Caltrain Passenger Station - On Structure			Each	\$	15,000,000			\$	-			\$	-			\$	-			\$	-	
Caltrain Passenger Station - In Tunnel or Subway			Each	\$	15,000,000			\$	-			\$	-			\$	-			\$	-	
Caltrain Passenger Station - In Trench			Each	\$	15,000,000			\$	-			\$	-			\$	-			\$	-	
3 Maintenance Facility			Each	\$	123,921,884			\$	-			\$	-			\$	-			\$	-	
4 Parking - Structures			space	\$	-			\$	-			\$	-			\$	-			\$	-	
5 Parking - At Grade			space	\$	-			\$	-			\$	-			\$	-			\$	-	
Rail & Utility Relocation																						
1 Single Track Relocation (Temporary)			Mile	\$	2,000,896			\$	-			\$	-			\$	-			\$	-	
2 Single Track Relocation (Permanent)			Mile	\$	2,000,896			\$	-			\$	-			\$	-			\$	-	
3 Single Track Removal			Mile	\$	130,048			\$	-			\$	-			\$	-			\$	-	
4 Major Utility Relocations - Dense Urban			Mile	\$	1,548,288			\$	-			\$	-			\$	-			\$	-	
5 Major Utility Relocations - Urban			Mile	\$	1,084,416			\$	-			\$	-			\$	-			\$	-	
6 Major Utility Relocations - Dense Suburban			Mile	\$	775,168			\$	-			\$	-			\$	-			\$	-	
7 Major Utility Relocations - Suburban			Mile	\$	464,896			\$	-			\$	-			\$	-			\$	-	
8 Major Utility Relocations - Undeveloped			Mile	\$	30,720			\$	-			\$	-			\$	-			\$	-	
ROW (Not Included)																						
ROW required for each segment																						
1 Dense Urban			Acre	\$	2,786,321			\$	-			\$	-			\$	-			\$	-	
2 Urban			Acre	\$	1,371,510			\$	-			\$	-			\$	-			\$	-	
3 Dense Suburban			Acre	\$	908,134			\$	-			\$	-			\$	-			\$	-	
4 Suburban			Acre	\$	208,418			\$	-			\$	-			\$	-			\$	-	
5 Undeveloped			Acre	\$	3,642			\$	-			\$	-			\$	-			\$	-	
ROW required for Temp. Construction Easement								\$	-			\$	-			\$	-			\$	-	
1 Dense Urban			Acre					B				B										
2 Urban			Acre					\$	-			\$	-			\$	-			\$	-	
3 Dense Suburban			Acre					\$	-			\$	-			\$	-			\$	-	
4 Suburban			Acre					\$	-			\$	-			\$	-			\$	-	
5 Undeveloped			Acre					\$	-			\$	-			\$	-			\$	-	
Right-of-Way Required for Stations, Maintenance & Parking Facilities																						
6 Dense Urban			Acre	\$	2,786,321			\$	-			\$	-			\$	-			\$	-	
7 Urban			Acre	\$	1,371,510			\$	-			\$	-			\$	-			\$	-	
8 Dense Suburban			Acre	\$	908,134			\$	-			\$	-			\$	-			\$	-	
9 Suburban			Acre	\$	208,418			\$	-			\$	-			\$	-			\$	-	
10 Undeveloped			Acre	\$	3,642			\$	-			\$	-			\$	-			\$	-	
Environmental Mitigation = 3% Line Costs								\$	96,282			\$	179,813			\$	11,598,996			\$	11,163,825	
System Elements																						
1 Signaling (ATC)			Mile	\$	2,070,000		1.33	\$	2,744,318		1.33	\$	2,744,318		1.33	\$	2,744,318		1.33	\$	2,744,318	
2 Communications (w/ Fiber Optic Backbone)			Mile	\$	540,000		1.33	\$	715,909		1.33	\$	715,909		1.33	\$	715,909		1.33	\$	715,909	
3 Wayside Protection System			Mile	\$	108,000		1.33	\$	143,182		1.33	\$	143,182		1.33	\$	143,182		1.33	\$	143,182	
Electrification Items																						
1 Traction Power supply			Mile	\$	1,170,000		1.33	\$	1,551,136		1.33	\$	1,551,136		1.33	\$	1,551,136		1.33	\$	1,551,136	
2 Traction Power Distribution			Mile	\$	1,485,000		1.33	\$	1,968,750		1.33	\$	1,968,750		1.33	\$	1,968,750		1.33	\$	1,968,750	
Subtotal								\$	10,428,972			\$	13,296,892			\$	405,355,483			\$	390,414,615	
Program Implementation Costs (per screening)								\$	2,659,388			\$	3,390,707			\$	103,365,648			\$	99,555,727	
Program Implementation Costs																						
Contingencies (per screening) (25%)								\$	2,607,243			\$	3,324,223			\$	101,338,871			\$	97,603,654	
Subtotal								\$	15,695,603			\$	20,011,822			\$	610,060,002			\$	587,573,996	
Subtotal (Rounded)								\$	16,000,000			\$	20,000,000			\$	610,000,000			\$	588,000,000	

COST ELEMENTS		UNIT	UNIT PRICE	Tunnel (HST only)			
Subsection 5			Base: 2009 (3rd Quarter)	C			
				Start: 1695 + 00	Start: 1765 + 00	1.33 Miles	
Subsection Details						Quant.	Cost
Double Track At-Grade (Mile)				Start: 0 + 00	Start: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Tunnel (Mile)				Start: 1695 + 00	End: 1765 + 00	1.33 Miles	
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Elevated (Mile)				Start: 0 + 00		0.00 Miles	
Four Track Tunnel (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Trench (Mile)				Start: 0 + 00		0.00 Miles	
Double Track Section - Total							
1 Double Track Section - At Grade	Mile	\$	2,100,224			0.00	\$ -
2 Double Track Section - On Structure	Mile	\$	4,700,160			0.00	\$ -
3 Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160			1.33 Miles	\$ 6,231,273
4 Double Track Section - In Trench	Mile	\$	4,700,160			0.00	\$ -
Four Track Section - Total							
Four-track Section - At Grade	Mile	\$	4,200,448			0.00	\$ -
Four-Track Section - On Structure	Mile	\$	9,400,320			0	\$ -
Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320			0.00 Miles	\$ -
Four-Track Section - In Trench	Mile	\$	9,400,320			0	\$ -
Single Track - Total							
5 Single Track Section - At Grade	Mile	\$	1,549,312			0	\$ -
6 Single Track Section - On structure	Mile	\$	2,350,080			0	\$ -
7 Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080			0	\$ -
8 Single Track Section - In Trench	Mile	\$	2,350,080			0	\$ -
9 Freight Double Track - At Grade	Mile	\$	2,839,552			0	\$ -
10 Freight Single Track - At Grade	Mile	\$	1,549,312			0	\$ -
Earthwork Items							
1 Site Preparation - Undeveloped	Acre	\$	9,216			0.00	\$ -
2 Total Cut	CY	\$	6.00			0.00	\$ -
3 Total Fill	CY	\$	6.00			0.00	\$ -
4 Borrow	CY	\$	13.00			0.00	\$ -
5 Spoil	CY	\$	13.00			0.00	\$ -
6 Landscape erosion Control	Acre	\$	6,144			0.00	\$ -
7 Security Fencing (Both sides of ROW)	Mile	\$	144,384			0.00	\$ -
8 Special Drainage Facilities	5% Earthwork					\$	\$ -
Structures, Tunnels, Walls							
1 Standard Structure	Mile	\$	34,972,672			0.00	\$ -
2 High Structure	Mile	\$	40,424,448			\$	\$ -
3 Long Span Structure	Mile	\$	61,919,232			\$	\$ -
4 Waterway Crossing - Primary	Mile	\$	85,342,208			\$	\$ -
5 Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408			\$	\$ -
6 Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264			\$	\$ -
7 Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312			\$	\$ -
8 Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896			\$	\$ -
9 Double Track Drill & Blast	Mile	\$	146,887,680			0.00	\$ -
10 Double Track Mined (Soft Soil)	Mile	\$	79,200,000			0.00	\$ -
Double Track TBM (<6 Miles)	Mile	\$	106,637,312			0.00	\$ -
Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896			1.33	\$ 234,289,067
11 Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952			\$	\$ -
12 Crossovers	ea	\$	442,368			\$	\$ -
13 Cut & Cover Double Track Tunnel	Mile	\$	131,246,080			1.33	\$ 174,000,485
14 Trench Short	Mile	\$	78,843,904			0.00	\$ -
15 Trench Long	Mile	\$	57,524,224			\$	\$ -
16 Mechanical & Electrical for Tunnels	Mile	\$	11,848,704			\$	\$ -
17 Retaining Walls	Mile	\$	8,613,888			1.33	\$ 11,419,927
18 Containment Walls	Mile	\$	5,907,456			0.00	\$ -
19 Single Track Cut and Cover Subway	Mile	\$	131,246,080			\$	\$ -
Four Track Drill & Blast	Mile	\$	293,775,360			\$	\$ -
Four Track Mined (Soft Soil)	Mile	\$	158,400,000			0.00	\$ -
Four Track TBM (<6 Miles)	Mile	\$	213,274,624			0.00	\$ -
Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792			\$	\$ -
Four Track Cut & Cover Tunnel	Mile	\$	262,492,160			0.00	\$ -
Grade Separations							
1 Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352			\$	\$ -
Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528			\$	\$ -
2 Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680			0	\$ -
3 Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568			\$	\$ -
4 Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520			\$	\$ -
5 Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216			\$	\$ -
Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816			\$	\$ -
6 Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328			\$	\$ -
7 Street Bridging HSR Trench	ea	\$	1,398,784			0	\$ -
8 Minor Crossing Closures	ea	\$	87,040			0	\$ -

COST ELEMENTS		UNIT	UNIT PRICE	Tunnel (HST only)		
Subsection 5			Base: 2009 (3rd Quarter)	C		
				Start: 1695 + 00	Start: 1765 + 00	1.33 Miles
Subsection Details					Quant.	Cost
Double Track At-Grade (Mile)				Start: 0 + 00	Start: 0 + 00	0.00 Miles
Double Track Elevated (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles
Double Track Tunnel (Mile)				Start: 1695 + 00	End: 1765 + 00	1.33 Miles
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles
Four Track Elevated (Mile)				Start: 0 + 00		0.00 Miles
Four Track Tunnel (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles
Four Track Trench (Mile)				Start: 0 + 00		0.00 Miles
Building Items						
1 Intermediate Passenger Stations	Each	\$	-			\$ -
2 Terminal Passenger Stations	Each	\$	-			\$ -
Caltrain Passenger Station - At-Grade	Each	\$	15,000,000			\$ -
Caltrain Passenger Station - On Structure	Each	\$	15,000,000			\$ -
Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000			\$ -
Caltrain Passenger Station - In Trench	Each	\$	15,000,000			\$ -
3 Maintenance Facility	Each	\$	123,921,884			\$ -
4 Parking - Structures	space	\$	-			\$ -
5 Parking - At Grade	space	\$	-			\$ -
Rail & Utility Relocation						
1 Single Track Relocation (Temporary)	Mile	\$	2,000,896			\$ -
2 Single Track Relocation (Permanent)	Mile	\$	2,000,896			\$ -
3 Single Track Removal	Mile	\$	130,048			\$ -
4 Major Utility Relocations - Dense Urban	Mile	\$	1,548,288			\$ -
5 Major Utility Relocations - Urban	Mile	\$	1,084,416			\$ -
6 Major Utility Relocations - Dense Suburban	Mile	\$	775,168			\$ -
7 Major Utility Relocations - Suburban	Mile	\$	464,896			\$ -
8 Major Utility Relocations - Undeveloped	Mile	\$	30,720			\$ -
ROW (Not Included)						
ROW required for each segment						
1 Dense Urban	Acre	\$	2,786,321			\$ -
2 Urban	Acre	\$	1,371,510			\$ -
3 Dense Suburban	Acre	\$	908,134			\$ -
4 Suburban	Acre	\$	208,418			\$ -
5 Undeveloped	Acre	\$	3,642			\$ -
ROW required for Temp. Construction Easement						
1 Dense Urban	Acre					\$ -
2 Urban	Acre					\$ -
3 Dense Suburban	Acre					\$ -
4 Suburban	Acre					\$ -
5 Undeveloped	Acre					\$ -
Right-of-Way Required for Stations, Maintenance & Parking Facilities						
6 Dense Urban	Acre	\$	2,786,321			\$ -
7 Urban	Acre	\$	1,371,510			\$ -
8 Dense Suburban	Acre	\$	908,134			\$ -
9 Suburban	Acre	\$	208,418			\$ -
10 Undeveloped	Acre	\$	3,642			\$ -
Environmental Mitigation = 3% Line Costs						\$ 12,778,223
System Elements						
1 Signaling (ATC)	Mile	\$	2,070,000			1.33 \$ 2,744,318
2 Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			1.33 \$ 715,909
3 Wayside Protection System	Mile	\$	108,000			1.33 \$ 143,182
Electrification Items						
1 Traction Power supply	Mile	\$	1,170,000			1.33 \$ 1,551,136
2 Traction Power Distribution	Mile	\$	1,485,000			1.33 \$ 1,968,750
Subtotal						\$ 445,842,270
Program Implementation Costs (per screening)						\$ 113,689,779
Program Implementation Costs						
Contingencies (per screening) (25%)						\$ 111,460,567
Subtotal						\$ 670,992,616
Subtotal (Rounded)						\$ 671,000,000

Subsection 6	6A (1.2 miles)			6B (0.7 miles)				
	At Grade	Covered Trench/Tunnel	Deep Tunnel (HST Only)	Aerial Viaduct	At Grade	Open Trench	Covered Trench/Tunnel	Deep Tunnel (HST Only)
Capital Cost (\$2009 in Millions) does not include ROW	\$75 (4 tracks) \$48 (2 tracks)	\$599	\$242 (2 tracks)	\$52 (4 tracks) \$47 (2 tracks)	\$41 (4 tracks) \$39 (2 tracks)	\$123	\$321	\$137 (2 tracks)
Acquisition Cost of Permanent ROW	Highest	Lowest	Lowest	Medium	Highest	Medium	Lowest	Lowest
Notes:	4 tracks - 1. Grade separation at Palo Alto Avenue. 2. Caltrain Palo Alto station. 3. Potential HST Palo Alto station (costs not included). 2 tracks - 1. Grade separation at Palo Alto Avenue. 2. Potential HST Palo Alto station (costs not included). 3. <i>Must be combined with 2 track deep tunnel option.</i>	1. Raise University Ave, Homer (Pedestrian) Ave, and Embarcadero Road. 2. Caltrain Palo Alto station. 3. Potential HST Palo Alto station (costs not included).	2 tracks - 1. Caltrain two tracks to remain at grade. 2. No potential HST Palo Alto station. 3. <i>Must be combined with 2 track at grade option.</i>	4 tracks - No notes 2 tracks - 1. <i>Must be combined with 2 track deep tunnel option.</i>	4 tracks - No notes 2 tracks - 1. Grade separation at Churchill Avenue. 2. <i>Must be combined with 2 track deep tunnel option.</i>			2 tracks - 1. Caltrain two tracks to remain at grade or aerial viaduct. 2. <i>Must be combined with 2 track aerial viaduct or at grade option.</i>

Subsection 6	6C (1.4 miles)					6D (0.6 miles)				
	Aerial Viaduct	At Grade	Open Trench	Covered Trench/Tunnel	Deep Tunnel (HST Only)	Aerial Viaduct	At Grade	Open Trench	Covered Trench/Tunnel	Deep Tunnel (HST Only)
Capital Cost (\$2009 in Millions) does not include ROW	\$133 (4 tracks) \$122 (2 tracks)	\$46 (4 tracks) \$18 (2 tracks)	\$278	\$694	\$284 (2 tracks)	\$44 (4 tracks) \$40 (2 tracks)	\$112 (4 tracks) \$72 (2 tracks)	\$112	\$272	\$114 (2 tracks)
Acquisition Cost of Permanent ROW	Medium	Highest	Medium	Lowest	Lowest	Medium	Highest	Medium	Lowest	Lowest
Notes:	4 tracks - No notes 2 tracks - 1. Caltrain California Avenue station. 2. <i>Must be combined with 2 track deep tunnel option.</i>	4 tracks - No notes 2 tracks - 1. Caltrain California Avenue station. 2. <i>Must be combined with 2 track deep tunnel option.</i>	1. Caltrain California Avenue station. 2. Raise Oregon Expressway.	1. Caltrain California Avenue station. 2. Raise Oregon Expressway.	2 tracks - 1. Caltrain two tracks to remain at grade or aerial viaduct. 2. <i>Must be combined with 2 track aerial viaduct or at grade option.</i>	4 tracks - No notes 2 tracks - 1. <i>Must be combined with 2 track deep tunnel option.</i>	4 tracks - 1. Grade separation at East Meadow Drive and Charleston Road. 2 tracks - 1. Grade separation at East Meadow Drive and Charleston Road. 2. <i>Must be combined with 2 track deep tunnel option.</i>			2 tracks - 1. Caltrain two tracks to remain at grade or aerial viaduct. 2. <i>Must be combined with 2 track aerial viaduct or at grade option.</i>

COST ELEMENTS			UNIT	UNIT PRICE	At-Grade (2 tracks)				At-Grade (4 tracks)				Covered Trench				Tunnel (HST only)			
Subsection 6			Base: 2009 (3rd Quarter)	A				A				A				A				
				Start: 1765 + 00	End: 1829 + 00	1.21 Miles		Start: 1765 + 00	End: 1829 + 00	1.21 Miles		Start: 1765 + 00	End: 1829 + 00	1.21 Miles		Start: 1765 + 00	End: 1829 + 00	1.21 Miles		
Subsection Details					Quant.	Cost			Quant.	Cost			Quant.	Cost			Quant.	Cost		
Double Track At-Grade (Mile)				Start: 1765 + 00	End: 1829 + 00	1.21 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
Double Track Elevated (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Double Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1765 + 00	End: 1829 + 00	1.21 Miles		
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 0 + 00		0.00 Miles		Start: 1765 + 00	End: 1829 + 00	1.21 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Four Track Elevated (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
Four Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1765 + 00	End: 1829 + 00	1.21 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
Four Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
Double Track Section - Total																				
1 Double Track Section - At Grade	Mile	\$	2,100,224			1.21	\$	2,545,726		0.00	\$	-		0	\$	-		0.00	\$	
2 Double Track Section - On Structure	Mile	\$	4,700,160			0.00	\$	-		0.00	\$	-		0	\$	-		0.00	\$	
3 Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160			0.00	\$	-		0.00	\$	-		0	\$	-		1.21	\$	
4 Double Track Section - In Trench	Mile	\$	4,700,160			0.00	\$	-		0.00	\$	-		0	\$	-		0.00	\$	
Four Track Section - Total																				
Four-track Section - At Grade	Mile	\$	4,200,448			0.000000	\$	-		1.21	\$	5,091,452		0.00	\$	-		0.00	\$	
Four-Track Section - On Structure	Mile	\$	9,400,320			0	\$	-		0	\$	-		0.00	\$	-		0.00	\$	
Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320			0	\$	-		0	\$	-		1.21	\$	11,394,327		0.00	\$	
Four-Track Section - In Trench	Mile	\$	9,400,320			0	\$	-		0	\$	-		0.00	\$	-		0.00	\$	
Single Track - Total																				
5 Single Track Section - At Grade	Mile	\$	1,549,312			0	\$	-		0	\$	-		0	\$	-		0	\$	
6 Single Track Section - On structure	Mile	\$	2,350,080			0	\$	-		0	\$	-		0	\$	-		0	\$	
7 Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080			0	\$	-		0	\$	-		0	\$	-		0	\$	
8 Single Track Section - In Trench	Mile	\$	2,350,080			0	\$	-		0	\$	-		0	\$	-		0	\$	
9 Freight Double Track - At Grade			Mile	\$	2,839,552	0	\$	-		0	\$	-		0	\$	-		0	\$	
10 Freight Single Track - At Grade			Mile	\$	1,549,312	0	\$	-		0	\$	-		0	\$	-		0	\$	
Earthwork Items																				
1 Site Preparation - Undeveloped	Acre	\$	9,216			9.55	\$	88,013		16.16	\$	148,945		16.16	\$	148,945		0.00	\$	
2 Total Cut	CY	\$	6.00			0.00	\$	-		0.00	\$	-		1042962.96	\$	6,257,778		0.00	\$	
3 Total Fill	CY	\$	6.00			0.00	\$	-		0.00	\$	-		521481.48	\$	3,128,889		0.00	\$	
4 Borrow	CY	\$	13.00			0.00	\$	-		0.00	\$	-		0.00	\$	-		0.00	\$	
5 Spoil	CY	\$	13.00			0.00	\$	-		0.00	\$	-		521481.48	\$	6,779,259		0.00	\$	
6 Landscape erosion Control	Acre	\$	6,144			0.00	\$	-		0.00	\$	-		0.00	\$	-		0.00	\$	
7 Security Fencing (Both sides of ROW)	Mile	\$	144,384			1.21	\$	175,011		1.21	\$	175,011		0.00	\$	-		0.00	\$	
8 Special Drainage Facilities	5% Earthwork						\$	13,151			\$	16,198			\$	815,744			\$	
Structures, Tunnels, Walls																				
1 Standard Structure	Mile	\$	34,972,672			0	\$	-		0	\$	-		0	\$	-		0	\$	
2 High Structure	Mile	\$	40,424,448				\$	-			\$	-			\$	-			\$	
3 Long Span Structure	Mile	\$	61,919,232				\$	-			\$	-			\$	-			\$	
4 Waterway Crossing - Primary	Mile	\$	85,342,208				\$	-			\$	-			\$	-			\$	
5 Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408			0.02	\$	1,743,360		0.02	\$	1,743,360			\$	-		0.01	\$	
6 Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264				\$	-			\$	-			\$	-			\$	
7 Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312				\$	-			\$	-			\$	-			\$	
8 Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896				\$	-			\$	-			\$	-			\$	
9 Double Track Drill & Blast	Mile	\$	146,887,680			0	\$	-		0	\$	-		0	\$	-		0.00	\$	
10 Double Track Mined (Soft Soil)	Mile	\$	79,200,000				\$	-			\$	-			\$	-		0.00	\$	
Double Track TBM (<6 Miles)	Mile	\$	106,637,312				\$	-			\$	-			\$	-		1.21	\$	
Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896				\$	-			\$	-			\$	-		0.00	\$	
11 Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952				\$	-			\$	-			\$	-			\$	
12 Crossovers	ea	\$	442,368				\$	-			\$	-			\$	-			\$	
13 Cut & Cover Double Track Tunnel	Mile	\$	131,246,080			0	\$	-		0	\$	-		0.00	\$	-		0.00	\$	
14 Trench Short	Mile	\$	78,843,904			0	\$	-		0	\$	-		0.00	\$	-		0.00	\$	
15 Trench Long	Mile	\$	57,524,224				\$	-			\$	-			\$	-			\$	
16 Mechanical & Electrical for Tunnels	Mile	\$	11,848,704			0	\$	-		0	\$	-		1.21	\$	14,362,065		1.21	\$	
17 Retaining Walls	Mile	\$	8,613,888			0	\$	-		0	\$	-		0.00	\$	-		0.00	\$	
18 Containment Walls	Mile	\$	5,907,456			0	\$	-		0	\$	-		0.00	\$	-		0.00	\$	
19 Single Track Cut and Cover Subway	Mile	\$	131,246,080				\$	-			\$	-			\$	-			\$	
Four Track Drill & Blast	Mile	\$	293,775,360				\$	-			\$	-		0.00	\$	-			\$	
Four Track Mined (Soft Soil)	Mile	\$	158,400,000				\$	-			\$	-		0.00	\$	-			\$	
Four Track TBM (<6 Miles)	Mile	\$	213,274,624				\$	-			\$	-			\$	-		0.00	\$	
Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792				\$	-			\$	-			\$	-			\$	
Four Track Cut & Cover Tunnel	Mile	\$	262,492,160			0.00	\$	-		0.00	\$	-		1.21	\$	318,172,315		0.00	\$	
Grade Separations																				
1 Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352				\$	-			\$	-			\$	-			\$	
Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528			1	\$	19,926,528		1	\$	19,926,528			\$	-			\$	
2 Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680				\$	-			\$	-			\$	-			\$	
3 Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568				\$	-			\$	-			\$	-			\$	
4 Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520				\$	-			\$	-			\$	-			\$	
5 Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216				\$	-			\$	-			\$	-			\$	
Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816				\$	-			\$	-			\$	-			\$	
6 Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328				\$	-			\$	-			\$	-			\$	
7 Street Bridging HSR Trench	ea	\$	1,398,784				\$	-			\$	-		3	\$	4,196,352			\$	
8 Minor Crossing Closures	ea	\$	87,040				\$	-			\$	-			\$	-			\$	
Building Items																				

COST ELEMENTS			UNIT	UNIT PRICE	At-Grade (2 tracks)		At-Grade (4 tracks)				Covered Trench				Tunnel (HST only)							
Subsection 6				Base: 2009 (3rd Quarter)	A		A				A				A							
					Start: 1765 + 00	End: 1829 + 00	1.21 Miles		Start: 1765 + 00	End: 1829 + 00	1.21 Miles		Start: 1765 + 00	End: 1829 + 00	1.21 Miles		Start: 1765 + 00	End: 1829 + 00	1.21 Miles			
Subsection Details						Quant.	Cost			Quant.	Cost			Quant.	Cost			Quant.	Cost			
Double Track At-Grade (Mile)					Start: 1765 + 00	End: 1829 + 00	1.21 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1765 + 00	End: 1829 + 00	1.21 Miles			
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00		0.00 Miles		Start: 1765 + 00	End: 1829 + 00	1.21 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1765 + 00	End: 1829 + 00	1.21 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
1 Intermediate Passenger Stations	Each	\$	-				\$	-			\$	-			\$	-			\$	-		
2 Terminal Passenger Stations	Each	\$	-				\$	-			\$	-			\$	-			\$	-		
Caltrain Passenger Station - At-Grade	Each	\$	15,000,000			0	\$	-			1	\$	15,000,000			\$	-			\$	-	
Caltrain Passenger Station - On Structure	Each	\$	15,000,000				\$	-				\$	-			\$	-			\$	-	
Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000				\$	-				\$	-			\$	-			\$	-	
Caltrain Passenger Station - In Trench	Each	\$	15,000,000				\$	-				\$	-		1	\$	15,000,000		0	\$	-	
3 Maintenance Facility	Each	\$	123,921,884				\$	-				\$	-			\$	-			\$	-	
4 Parking - Structures	space	\$	-				\$	-				\$	-			\$	-			\$	-	
5 Parking - At Grade	space	\$	-				\$	-				\$	-			\$	-			\$	-	
Rail & Utility Relocation																						
1 Single Track Relocation (Temporary)	Mile	\$	2,000,896				\$	-				\$	-			\$	-			\$	-	
2 Single Track Relocation (Permanent)	Mile	\$	2,000,896				\$	-				\$	-			\$	-			\$	-	
3 Single Track Removal	Mile	\$	130,048				\$	-				\$	-			\$	-			\$	-	
4 Major Utility Relocations - Dense Urban	Mile	\$	1,548,288				\$	-				\$	-			\$	-			\$	-	
5 Major Utility Relocations - Urban	Mile	\$	1,084,416				\$	-				\$	-			\$	-			\$	-	
6 Major Utility Relocations - Dense Suburban	Mile	\$	775,168				\$	-				\$	-			\$	-			\$	-	
7 Major Utility Relocations - Suburban	Mile	\$	464,896				\$	-				\$	-			\$	-			\$	-	
8 Major Utility Relocations - Undeveloped	Mile	\$	30,720				\$	-				\$	-			\$	-			\$	-	
ROW (Not Included)																						
ROW required for each segment																						
1 Dense Urban	Acre	\$	2,786,321				\$	-				\$	-			\$	-			\$	-	
2 Urban	Acre	\$	1,371,510				\$	-				\$	-			\$	-			\$	-	
3 Dense Suburban	Acre	\$	908,134				\$	-				\$	-			\$	-			\$	-	
4 Suburban	Acre	\$	208,418				\$	-				\$	-			\$	-			\$	-	
5 Undeveloped	Acre	\$	3,642				\$	-				\$	-			\$	-			\$	-	
ROW required for Temp. Construction Easement																						
1 Dense Urban	Acre						\$	-				\$	-			\$	-			\$	-	
2 Urban	Acre						\$	-				\$	-			\$	-			\$	-	
3 Dense Suburban	Acre						\$	-				\$	-			\$	-			\$	-	
4 Suburban	Acre						\$	-				\$	-			\$	-			\$	-	
5 Undeveloped	Acre						\$	-				\$	-			\$	-			\$	-	
Right-of-Way Required for Stations, Maintenance & Parking Facilities																						
6 Dense Urban	Acre	\$	2,786,321				\$	-				\$	-			\$	-			\$	-	
7 Urban	Acre	\$	1,371,510				\$	-				\$	-			\$	-			\$	-	
8 Dense Suburban	Acre	\$	908,134				\$	-				\$	-			\$	-			\$	-	
9 Suburban	Acre	\$	208,418				\$	-				\$	-			\$	-			\$	-	
10 Undeveloped	Acre	\$	3,642				\$	-				\$	-			\$	-			\$	-	
Environmental Mitigation = 3% Line Costs							\$	734,754				\$	1,263,045				\$	11,407,670			\$	4,500,418
System Elements																						
1 Signaling (ATC)	Mile	\$	2,070,000			1.21	\$	2,509,091			1.21	\$	2,509,091		1.21	\$	2,509,091		1.21	\$	2,509,091	
2 Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			1.21	\$	654,545			1.21	\$	654,545		1.21	\$	654,545		1.21	\$	654,545	
3 Wayside Protection System	Mile	\$	108,000			1.21	\$	130,909			1.21	\$	130,909		1.21	\$	130,909		1.21	\$	130,909	
Electrification Items																						
1 Traction Power supply	Mile	\$	1,170,000			1.21	\$	1,418,182			1.21	\$	1,418,182		1.21	\$	1,418,182		1.21	\$	1,418,182	
2 Traction Power Distribution	Mile	\$	1,485,000			1.21	\$	1,800,000			1.21	\$	1,800,000		1.21	\$	1,800,000		1.21	\$	1,800,000	
Subtotal							\$	31,739,270				\$	49,877,266			\$	398,176,072			\$	161,027,066	
Program Implementation Costs (per screening)							\$	8,093,514				\$	12,718,703			\$	101,534,898			\$	41,061,902	
Program Implementation Costs																						
Contingencies (per screening) (25%)							\$	7,934,818				\$	12,469,317			\$	99,544,018			\$	40,256,766	
Subtotal							\$	47,767,602				\$	75,065,286			\$	599,254,989			\$	242,345,734	
Subtotal (Rounded)							\$	48,000,000				\$	75,000,000			\$	599,000,000			\$	242,000,000	

COST ELEMENTS			UNIT	UNIT PRICE	Elevated Viaduct (2 tracks)				Elevated Viaduct (4 tracks)				At-Grade (2 tracks)				At-Grade (4 tracks)				
Subsection 6				Base: 2009 (3rd Quarter)	B				B				B				B				
					Start: 1829 + 00	End: 1865 + 00	0.68 Miles		Start: 1829 + 00	End: 1865 + 00	0.68 Miles		Start: 1829 + 00	End: 1865 + 00	0.68 Miles		Start: 1829 + 00	End: 1865 + 00	0.68 Miles		
Subsection Details						Quant.	Cost			Quant.	Cost			Quant.	Cost			Quant.	Cost		
Double Track At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1829 + 00	End: 1865 + 00	0.68 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
Double Track Elevated (Mile)					Start: 1829 + 00	End: 1865 + 00	0.68 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1829 + 00	End: 1865 + 00	0.68 Miles		
Four Track Elevated (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1829 + 00	End: 1865 + 00	0.68 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
1 Intermediate Passenger Stations	Each	\$	-				\$	-			\$	-			\$	-			\$	-	
2 Terminal Passenger Stations	Each	\$	-				\$	-			\$	-			\$	-			\$	-	
Caltrain Passenger Station - At-Grade	Each	\$	15,000,000				\$	-			\$	-			\$	-			\$	-	
Caltrain Passenger Station - On Structure	Each	\$	15,000,000				\$	-			\$	-			\$	-			\$	-	
Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000				\$	-			\$	-			\$	-			\$	-	
Caltrain Passenger Station - In Trench	Each	\$	15,000,000				\$	-			\$	-			\$	-			\$	-	
3 Maintenance Facility	Each	\$	123,921,884				\$	-			\$	-			\$	-			\$	-	
4 Parking - Structures	space	\$	-				\$	-			\$	-			\$	-			\$	-	
5 Parking - At Grade	space	\$	-				\$	-			\$	-			\$	-			\$	-	
Rail & Utility Relocation																					
1 Single Track Relocation (Temporary)	Mile	\$	2,000,896				\$	-			\$	-			\$	-			\$	-	
2 Single Track Relocation (Permanent)	Mile	\$	2,000,896				\$	-			\$	-			\$	-			\$	-	
3 Single Track Removal	Mile	\$	130,048				\$	-			\$	-			\$	-			\$	-	
4 Major Utility Relocations - Dense Urban	Mile	\$	1,548,288				\$	-			\$	-			\$	-			\$	-	
5 Major Utility Relocations - Urban	Mile	\$	1,084,416				\$	-			\$	-			\$	-			\$	-	
6 Major Utility Relocations - Dense Suburban	Mile	\$	775,168				\$	-			\$	-			\$	-			\$	-	
7 Major Utility Relocations - Suburban	Mile	\$	464,896				\$	-			\$	-			\$	-			\$	-	
8 Major Utility Relocations - Undeveloped	Mile	\$	30,720				\$	-			\$	-			\$	-			\$	-	
ROW (Not Included)																					
ROW required for each segment																					
1 Dense Urban	Acre	\$	2,786,321				\$	-			\$	-			\$	-			\$	-	
2 Urban	Acre	\$	1,371,510				\$	-			\$	-			\$	-			\$	-	
3 Dense Suburban	Acre	\$	908,134				\$	-			\$	-			\$	-			\$	-	
4 Suburban	Acre	\$	208,418				\$	-			\$	-			\$	-			\$	-	
5 Undeveloped	Acre	\$	3,642				\$	-			\$	-			\$	-			\$	-	
ROW required for Temp. Construction Easement																					
1 Dense Urban	Acre						\$	-			\$	-			\$	-			\$	-	
2 Urban	Acre						\$	-			\$	-			\$	-			\$	-	
3 Dense Suburban	Acre						\$	-			\$	-			\$	-			\$	-	
4 Suburban	Acre						\$	-			\$	-			\$	-			\$	-	
5 Undeveloped	Acre						\$	-			\$	-			\$	-			\$	-	
Right-of-Way Required for Stations, Maintenance & Parking Facilities																					
6 Dense Urban	Acre	\$	2,786,321				\$	-			\$	-			\$	-			\$	-	
7 Urban	Acre	\$	1,371,510				\$	-			\$	-			\$	-			\$	-	
8 Dense Suburban	Acre	\$	908,134				\$	-			\$	-			\$	-			\$	-	
9 Suburban	Acre	\$	208,418				\$	-			\$	-			\$	-			\$	-	
10 Undeveloped	Acre	\$	3,642				\$	-			\$	-			\$	-			\$	-	
Environmental Mitigation = 3% Line Costs							\$	811,490			\$	907,629			\$	645,415			\$	689,454	
System Elements																					
1 Signaling (ATC)	Mile	\$	2,070,000			0.68	\$	1,411,364			0.68	\$	1,411,364		0.68	\$	1,411,364		0.68	\$	1,411,364
2 Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			0.68	\$	368,182			0.68	\$	368,182		0.68	\$	368,182		0.68	\$	368,182
3 Wayside Protection System	Mile	\$	108,000			0.68	\$	73,636			0.68	\$	73,636		0.68	\$	73,636		0.68	\$	73,636
Electrification Items																					
1 Traction Power supply	Mile	\$	1,170,000			0.68	\$	797,727			0.68	\$	797,727		0.68	\$	797,727		0.68	\$	797,727
2 Traction Power Distribution	Mile	\$	1,485,000			0.68	\$	1,012,500			0.68	\$	1,012,500		0.68	\$	1,012,500		0.68	\$	1,012,500
Subtotal							\$	31,524,557			\$	34,825,351			\$	25,822,672			\$	27,334,670	
Program Implementation Costs (per screening)							\$	8,038,762			\$	8,880,465			\$	6,584,781			\$	6,970,341	
Program Implementation Costs																					
Contingencies (per screening) (25%)							\$	7,881,139			\$	8,706,338			\$	6,455,668			\$	6,833,667	
Subtotal							\$	47,444,458			\$	52,412,154			\$	38,863,121			\$	41,138,678	
Subtotal (Rounded)							\$	47,000,000			\$	52,000,000			\$	39,000,000			\$	41,000,000	

COST ELEMENTS			UNIT	UNIT PRICE	Open Trench				Covered Trench				Tunnel (HST only)			
Subsection 6			Base: 2009 (3rd Quarter)	B				B				B				
				Start: 1829 + 00	End: 1865 + 00	0.68 Miles		Start: 1829 + 00	End: 1865 + 00	0.68 Miles		Start: 1829 + 00	End: 1865 + 00	0.68 Miles		
Subsection Details					Quant.	Cost			Quant.	Cost			Quant.	Cost		
Double Track At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1829 + 00	End: 1865 + 00	0.68 Miles	
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 1829 + 00	End: 1865 + 00	0.68 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Trench (Mile)					Start: 1829 + 00	End: 1865 + 00	0.68 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Section - Total																
1 Double Track Section - At Grade	Mile	\$ 2,100,224					0.00 \$	-			0.00 \$	-			0.00 \$	
2 Double Track Section - On Structure	Mile	\$ 4,700,160					0.00 \$	-			0.00 \$	-			0.00 \$	
3 Double Track Section - In Tunnel or Subway	Mile	\$ 4,700,160					0.00 \$	-			0.00 \$	-			0.68 \$	
4 Double Track Section - In Trench	Mile	\$ 4,700,160					0.00 \$	-			0.00 \$	-			0.00 \$	
Four Track Section - Total																
Four-track Section - At Grade	Mile	\$ 4,200,448					0.00 \$	-			0.00 \$	-			0.00 \$	
Four-Track Section - On Structure	Mile	\$ 9,400,320					0.00 \$	-			0.00 \$	-			0.00 \$	
Four-Track Section - In Tunnel or Subway	Mile	\$ 9,400,320					0.00 \$	-			0.68 \$	6,409,309			0.00 \$	
Four-Track Section - In Trench	Mile	\$ 9,400,320					0.68 \$	6,409,309			0.00 \$	-			0.00 \$	
Single Track - Total																
5 Single Track Section - At Grade	Mile	\$ 1,549,312					0 \$	-			0 \$	-			0 \$	
6 Single Track Section - On structure	Mile	\$ 2,350,080					0 \$	-			0 \$	-			0 \$	
7 Single Track Section - In Tunnel or Subway	Mile	\$ 2,350,080					0 \$	-			0 \$	-			0 \$	
8 Single Track Section - In Trench	Mile	\$ 2,350,080					0 \$	-			0 \$	-			0 \$	
9 Freight Double Track - At Grade	Mile	\$ 2,839,552					0 \$	-			0 \$	-			0 \$	
10 Freight Single Track - At Grade	Mile	\$ 1,549,312					0 \$	-			0 \$	-			0 \$	
Earthwork Items																
1 Site Preparation - Undeveloped	Acre	\$ 9,216					9.09 \$	83,782			9.09 \$	83,782			0.00 \$	
2 Total Cut	CY	\$ 6.00					220000.00 \$	1,320,000			586666.67 \$	3,520,000			0.00 \$	
3 Total Fill	CY	\$ 6.00					0.00 \$	-			293333.33 \$	1,760,000			0.00 \$	
4 Borrow	CY	\$ 13.00					0.00 \$	-			0.00 \$	-			0.00 \$	
5 Spoil	CY	\$ 13.00					220000.00 \$	2,860,000			293333.33 \$	3,813,333			0.00 \$	
6 Landscape erosion Control	Acre	\$ 6,144					9.09 \$	55,855			0.00 \$	-			0.00 \$	
7 Security Fencing (Both sides of ROW)	Mile	\$ 144,384					0.68 \$	98,444			0.00 \$	-			0.00 \$	
8 Special Drainage Facilities	5% Earthwork						\$	220,904			\$	458,856			\$	
Structures, Tunnels, Walls																
1 Standard Structure	Mile	\$ 34,972,672					0 \$	-			0 \$	-			0 \$	
2 High Structure	Mile	\$ 40,424,448					\$	-			\$	-			\$	
3 Long Span Structure	Mile	\$ 61,919,232					\$	-			\$	-			\$	
4 Waterway Crossing - Primary	Mile	\$ 85,342,208					\$	-			\$	-			\$	
5 Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$ 92,049,408					\$	-			\$	-			\$	
6 Twin Single Track Drill&Blast (<6 Miles)	Mile	\$ 142,731,264					\$	-			0.01 \$	697,344		0.01 \$	697,344	
7 Twin Single Track TBM (<6 Miles)	Mile	\$ 106,637,312					\$	-			\$	-			\$	
8 Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$ 176,720,896					\$	-			\$	-			\$	
9 Double Track Drill & Blast	Mile	\$ 146,887,680					0 \$	-			0 \$	-			0.00 \$	
10 Double Track Mined (Soft Soil)	Mile	\$ 79,200,000					\$	-			\$	-			0.00 \$	
Double Track TBM (<6 Miles)	Mile	\$ 106,637,312													0.68 \$	
Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$ 176,720,896														
11 Seismic Chamber (Drill & Blast/Mined)	ea	\$ 126,205,952					\$	-			\$	-			\$	
12 Crossovers	ea	\$ 442,368					\$	-			\$	-			\$	
13 Cut & Cover Double Track Tunnel	Mile	\$ 131,246,080					0.00 \$	-			0 \$	-			0.00 \$	
14 Trench Short	Mile	\$ 78,843,904					0.68 \$	53,757,207			0.00 \$	-			0.00 \$	
15 Trench Long	Mile	\$ 57,524,224					\$	-			\$	-			\$	
16 Mechanical & Electrical for Tunnels	Mile	\$ 11,848,704					0.00 \$	-			0.68 \$	8,078,662		0.68 \$	8,078,662	
17 Retaining Walls	Mile	\$ 8,613,888					0.68 \$	5,873,105			0.00 \$	-			0.00 \$	
18 Containment Walls	Mile	\$ 5,907,456					0.68 \$	4,027,811			0.00 \$	-			0.00 \$	
19 Single Track Cut and Cover Subway	Mile	\$ 131,246,080					\$	-			\$	-			\$	
Four Track Drill & Blast	Mile	\$ 293,775,360					\$	-			\$	-			\$	
Four Track Mined (Soft Soil)	Mile	\$ 158,400,000					\$	-			\$	-			\$	
Four Track TBM (<6 Miles)	Mile	\$ 213,274,624													0.00 \$	
Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$ 353,441,792													0.00 \$	
Four Track Cut & Cover Tunnel	Mile	\$ 262,492,160					0.00 \$	-			0.68 \$	178,971,927		0.00 \$	-	
Grade Separations																
1 Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$ 13,284,352					\$	-			\$	-			\$	
Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$ 19,926,528					\$	-			\$	-			\$	
2 Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$ 2,759,680					\$	-			\$	-			\$	
3 Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$ 2,029,568					\$	-			\$	-			\$	
4 Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$ 3,563,520					\$	-			\$	-			\$	
5 Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$ 3,593,216					\$	-			\$	-			\$	
Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$ 2,850,816					\$	-			\$	-			\$	
6 Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$ 3,171,328					\$	-			\$	-			\$	
7 Street Bridging HSR Trench	ea	\$ 1,398,784					1 \$	1,398,784			0 \$	-			0 \$	
8 Minor Crossing Closures	ea	\$ 87,040					\$	-			\$	-			\$	
Building Items																

COST ELEMENTS			UNIT	UNIT PRICE	Open Trench				Covered Trench				Tunnel (HST only)			
Subsection 6				Base: 2009 (3rd Quarter)	B				B				B			
					Start: 1829 + 00	End: 1865 + 00	0.68 Miles		Start: 1829 + 00	End: 1865 + 00	0.68 Miles		Start: 1829 + 00	End: 1865 + 00	0.68 Miles	
Subsection Details							Quant.	Cost			Quant.	Cost			Quant.	Cost
Double Track At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1829 + 00	End: 1865 + 00	0.68 Miles	
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 1829 + 00	End: 1865 + 00	0.68 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Trench (Mile)					Start: 1829 + 00	End: 1865 + 00	0.68 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
1 Intermediate Passenger Stations	Each	\$	-				\$	-			\$	-			\$	-
2 Terminal Passenger Stations	Each	\$	-				\$	-			\$	-			\$	-
Caltrain Passenger Station - At-Grade	Each	\$15,000,000					\$	-			\$	-			\$	-
Caltrain Passenger Station - On Structure	Each	\$15,000,000					\$	-			\$	-			\$	-
Caltrain Passenger Station - In Tunnel or Subway	Each	\$15,000,000					\$	-			\$	-			\$	-
Caltrain Passenger Station - In Trench	Each	\$15,000,000					\$	-			\$	-			\$	-
3 Maintenance Facility	Each	\$ 123,921,884					\$	-			\$	-			\$	-
4 Parking - Structures	space	\$	-				\$	-			\$	-			\$	-
5 Parking - At Grade	space	\$	-				\$	-			\$	-			\$	-
Rail & Utility Relocation																
1 Single Track Relocation (Temporary)	Mile	\$ 2,000,896					\$	-			\$	-			\$	-
2 Single Track Relocation (Permanent)	Mile	\$ 2,000,896					\$	-			\$	-			\$	-
3 Single Track Removal	Mile	\$ 130,048					\$	-			\$	-			\$	-
4 Major Utility Relocations - Dense Urban	Mile	\$ 1,548,288					\$	-			\$	-			\$	-
5 Major Utility Relocations - Urban	Mile	\$ 1,084,416					\$	-			\$	-			\$	-
6 Major Utility Relocations - Dense Suburban	Mile	\$ 775,168					\$	-			\$	-			\$	-
7 Major Utility Relocations - Suburban	Mile	\$ 464,896					\$	-			\$	-			\$	-
8 Major Utility Relocations - Undeveloped	Mile	\$ 30,720					\$	-			\$	-			\$	-
ROW (Not Included)																
ROW required for each segment																
1 Dense Urban	Acre	\$ 2,786,321					\$	-			\$	-			\$	-
2 Urban	Acre	\$ 1,371,510					\$	-			\$	-			\$	-
3 Dense Suburban	Acre	\$ 908,134					\$	-			\$	-			\$	-
4 Suburban	Acre	\$ 208,418					\$	-			\$	-			\$	-
5 Undeveloped	Acre	\$ 3,642					\$	-			\$	-			\$	-
ROW required for Temp. Construction Easement																
1 Dense Urban	Acre						\$	-			\$	-			\$	-
2 Urban	Acre						\$	-			\$	-			\$	-
3 Dense Suburban	Acre						\$	-			\$	-			\$	-
4 Suburban	Acre						\$	-			\$	-			\$	-
5 Undeveloped	Acre						\$	-			\$	-			\$	-
Right-of-Way Required for Stations, Maintenance & Parking Facilities																
6 Dense Urban	Acre	\$ 2,786,321					\$	-			\$	-			\$	-
7 Urban	Acre	\$ 1,371,510					\$	-			\$	-			\$	-
8 Dense Suburban	Acre	\$ 908,134					\$	-			\$	-			\$	-
9 Suburban	Acre	\$ 208,418					\$	-			\$	-			\$	-
10 Undeveloped	Acre	\$ 3,642					\$	-			\$	-			\$	-
Environmental Mitigation = 3% Line Costs								\$ 2,283,156				\$ 6,113,796				\$ 2,540,381
System Elements																
1 Signaling (ATC)	Mile	\$ 2,070,000				0.68	\$ 1,411,364				0.68	\$ 1,411,364			0.68	\$ 1,411,364
2 Communications (w/ Fiber Optic Backbone)	Mile	\$ 540,000				0.68	\$ 368,182				0.68	\$ 368,182			0.68	\$ 368,182
3 Wayside Protection System	Mile	\$ 108,000				0.68	\$ 73,636				0.68	\$ 73,636			0.68	\$ 73,636
Electrification Items																
1 Traction Power supply	Mile	\$ 1,170,000				0.68	\$ 797,727				0.68	\$ 797,727			0.68	\$ 797,727
2 Traction Power Distribution	Mile	\$ 1,485,000				0.68	\$ 1,012,500				0.68	\$ 1,012,500			0.68	\$ 1,012,500
Subtotal								\$ 82,051,766				\$ 213,570,419				\$ 90,883,163
Program Implementation Costs (per screening)								\$ 20,923,200				\$ 54,460,457				\$ 23,175,207
Program Implementation Costs																
Contingencies (per screening) (25%)								\$ 20,512,941				\$ 53,392,605				\$ 22,720,791
Subtotal								\$ 123,487,908				\$ 321,423,480				\$ 136,779,160
Subtotal (Rounded)								\$ 123,000,000				\$ 321,000,000				\$ 137,000,000

COST ELEMENTS			UNIT	UNIT PRICE	Elevated Viaduct (2 tracks)			Elevated Viaduct (4 tracks)			At-Grade (2 tracks)			At-Grade (4 tracks)						
Subsection 6				Base: 2009 (3rd Quarter)	C			C			C			C						
					Start: 1865 + 00	End: 1940 + 00	1.42 Miles	Start: 1865 + 00	End: 1940 + 00	1.42 Miles	Start: 1865 + 00	End: 1940 + 00	1.42 Miles	Start: 1865 + 00	End: 1940 + 00	1.42 Miles				
Subsection Details						Quant.	Cost			Quant.	Cost			Quant.	Cost			Quant.	Cost	
Double Track At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1865 + 00	End: 1940 + 00	1.42 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)					Start: 1865 + 00	End: 1940 + 00	1.42 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1865 + 00	End: 1940 + 00	1.42 Miles	
Four Track Elevated (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1865 + 00	End: 1940 + 00	1.42 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Section - Total																				
1 Double Track Section - At Grade	Mile	\$	2,100,224				0 \$	-			0 \$	-			1.42 \$	2,983,273			0.00 \$	-
2 Double Track Section - On Structure	Mile	\$	4,700,160				1.42 \$	6,676,364			0 \$	-			0.00 \$	-			0.00 \$	-
3 Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160				0 \$	-			0 \$	-			0.00 \$	-			0.00 \$	-
4 Double Track Section - In Trench	Mile	\$	4,700,160				0 \$	-			0 \$	-			0.00 \$	-			0.00 \$	-
Four Track Section - Total																				
Four-track Section - At Grade	Mile	\$	4,200,448				0.00 \$	-			0.00 \$	-			0.00 \$	-			1.42 \$	5,966,545
Four-Track Section - On Structure	Mile	\$	9,400,320				0.00 \$	-			1.42 \$	13,352,727			0.00 \$	-			0.00 \$	-
Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320				0 \$	-			0 \$	-			0 \$	-			0 \$	-
Four-Track Section - In Trench	Mile	\$	9,400,320				0 \$	-			0 \$	-			0 \$	-			0 \$	-
Single Track - Total																				
5 Single Track Section - At Grade	Mile	\$	1,549,312				0 \$	-			0 \$	-			0 \$	-			0 \$	-
6 Single Track Section - On structure	Mile	\$	2,350,080				0 \$	-			0 \$	-			0 \$	-			0 \$	-
7 Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080				0 \$	-			0 \$	-			0 \$	-			0 \$	-
8 Single Track Section - In Trench	Mile	\$	2,350,080				0 \$	-			0 \$	-			0 \$	-			0 \$	-
9 Freight Double Track - At Grade	Mile	\$	2,839,552				0 \$	-			0 \$	-			0 \$	-			0 \$	-
10 Freight Single Track - At Grade	Mile	\$	1,549,312				0 \$	-			0 \$	-			0 \$	-			0 \$	-
Earthwork Items																				
1 Site Preparation - Undeveloped	Acre	\$	9,216				11.19 \$	103,140			18.94 \$	174,545			11.19 \$	103,140			18.94 \$	174,545
2 Total Cut	CY	\$	6.00				0.00 \$	-			0.00 \$	-			0 \$	-			0 \$	-
3 Total Fill	CY	\$	6.00				0.00 \$	-			0.00 \$	-			0 \$	-			0 \$	-
4 Borrow	CY	\$	13.00				0.00 \$	-			0.00 \$	-			0.00 \$	-			0.00 \$	-
5 Spoil	CY	\$	13.00				0.00 \$	-			0.00 \$	-			0.00 \$	-			0.00 \$	-
6 Landscape erosion Control	Acre	\$	6,144				0.00 \$	-			0.00 \$	-			0.00 \$	-			0.00 \$	-
7 Security Fencing (Both sides of ROW)	Mile	\$	144,384				0.00 \$	-			0.00 \$	-			1.42 \$	205,091			1.42 \$	205,091
8 Special Drainage Facilities	5% Earthwork						\$	5,157			\$	8,727			\$	15,412			\$	18,982
Structures, Tunnels, Walls																				
1 Standard Structure	Mile	\$	34,972,672				1.42 \$	49,677,091			1.42 \$	49,677,091			0.00 \$	-			0.00 \$	-
2 High Structure	Mile	\$	40,424,448				\$	-			\$	-			\$	-			\$	-
3 Long Span Structure	Mile	\$	61,919,232				\$	-			\$	-			\$	-			\$	-
4 Waterway Crossing - Primary	Mile	\$	85,342,208				\$	-			\$	-			\$	-			\$	-
5 Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408				\$	-			\$	-			0.01 \$	871,680			0.01 \$	871,680
6 Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264				\$	-			\$	-			\$	-			\$	-
7 Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312				\$	-			\$	-			\$	-			\$	-
8 Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896				\$	-			\$	-			\$	-			\$	-
9 Double Track Drill & Blast	Mile	\$	146,887,680				0 \$	-			0 \$	-			0 \$	-			0 \$	-
10 Double Track Mined (Soft Soil)	Mile	\$	79,200,000				\$	-			\$	-			\$	-			\$	-
Double Track TBM (<6 Miles)	Mile	\$	106,637,312				\$	-			\$	-			\$	-			\$	-
Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896				\$	-			\$	-			\$	-			\$	-
11 Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952				\$	-			\$	-			\$	-			\$	-
12 Crossovers	ea	\$	442,368				\$	-			\$	-			\$	-			\$	-
13 Cut & Cover Double Track Tunnel	Mile	\$	131,246,080				0 \$	-			0 \$	-			0 \$	-			0 \$	-
14 Trench Short	Mile	\$	78,843,904				0 \$	-			0 \$	-			0 \$	-			0 \$	-
15 Trench Long	Mile	\$	57,524,224				\$	-			\$	-			\$	-			\$	-
16 Mechanical & Electrical for Tunnels	Mile	\$	11,848,704				0 \$	-			0 \$	-			0 \$	-			0 \$	-
17 Retaining Walls	Mile	\$	8,613,888				0 \$	-			0 \$	-			0 \$	-			0 \$	-
18 Containment Walls	Mile	\$	5,907,456				0 \$	-			0 \$	-			0 \$	-			0 \$	-
19 Single Track Cut and Cover Subway	Mile	\$	131,246,080				\$	-			\$	-			\$	-			\$	-
Four Track Drill & Blast	Mile	\$	293,775,360				\$	-			\$	-			\$	-			\$	-
Four Track Mined (Soft Soil)	Mile	\$	158,400,000				\$	-			\$	-			\$	-			\$	-
Four Track TBM (<6 Miles)	Mile	\$	213,274,624				\$	-			\$	-			\$	-			\$	-
Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792				\$	-			\$	-			\$	-			\$	-
Four Track Cut & Cover Tunnel	Mile	\$	262,492,160				0.00 \$	-			0.00 \$	-			0.00 \$	-			0.00 \$	-
Grade Separations																				
1 Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352				\$	-			\$	-			\$	-			\$	-
Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528				\$	-			\$	-			\$	-			\$	-
2 Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680				\$	-			\$	-			\$	-			\$	-
3 Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568				\$	-			\$	-			\$	-			\$	-
4 Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520				\$	-			\$	-			\$	-			\$	-
5 Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216				\$	-			\$	-			\$	-			\$	-
Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816				\$	-			\$	-			\$	-			\$	-
6 Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328				\$	-			\$	-			\$	-			\$	-
7 Street Bridging HSR Trench	ea	\$	1,398,784				\$	-			\$	-			\$	-			\$	-
8 Minor Crossing Closures	ea	\$	87,040				\$	-			\$	-			\$	-			\$	-
Building Items																				

COST ELEMENTS			UNIT	UNIT PRICE	Elevated Viaduct (2 tracks)				Elevated Viaduct (4 tracks)				At-Grade (2 tracks)				At-Grade (4 tracks)					
Subsection 6				Base: 2009 (3rd Quarter)	C				C				C				C					
					Start: 1865 + 00	End: 1940 + 00	1.42 Miles		Start: 1865 + 00	End: 1940 + 00	1.42 Miles		Start: 1865 + 00	End: 1940 + 00	1.42 Miles		Start: 1865 + 00	End: 1940 + 00	1.42 Miles			
Subsection Details							Quant.	Cost			Quant.	Cost			Quant.	Cost			Quant.	Cost		
Double Track At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1865 + 00	End: 1940 + 00	1.42 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Double Track Elevated (Mile)					Start: 1865 + 00	End: 1940 + 00	1.42 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1865 + 00	End: 1940 + 00	1.42 Miles			
Four Track Elevated (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1865 + 00	End: 1940 + 00	1.42 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
1 Intermediate Passenger Stations	Each	\$	-				\$	-			\$	-			\$	-			\$	-		
2 Terminal Passenger Stations	Each	\$	-				\$	-			\$	-			\$	-			\$	-		
Caltrain Passenger Station - At-Grade	Each	\$	15,000,000				\$	-			\$	-		0	\$	-			1	\$ 15,000,000		
Caltrain Passenger Station - On Structure	Each	\$	15,000,000			1	\$ 15,000,000			1	\$ 15,000,000				\$	-				\$	-	
Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000				\$	-			\$	-			\$	-				\$	-	
1 Caltrain Passenger Station - In Trench	Each	\$	15,000,000				\$	-			\$	-			\$	-				\$	-	
3 Maintenance Facility	Each	\$	123,921,884				\$	-			\$	-			\$	-				\$	-	
4 Parking - Structures	space	\$	-				\$	-			\$	-			\$	-				\$	-	
5 Parking - At Grade	space	\$	-				\$	-			\$	-			\$	-				\$	-	
Rail & Utility Relocation																						
1 Single Track Relocation (Temporary)	Mile	\$	2,000,896				\$	-			\$	-			\$	-				\$	-	
2 Single Track Relocation (Permanent)	Mile	\$	2,000,896				\$	-			\$	-			\$	-				\$	-	
3 Single Track Removal	Mile	\$	130,048				\$	-			\$	-			\$	-				\$	-	
4 Major Utility Relocations - Dense Urban	Mile	\$	1,548,288				\$	-			\$	-			\$	-				\$	-	
5 Major Utility Relocations - Urban	Mile	\$	1,084,416				\$	-			\$	-			\$	-				\$	-	
6 Major Utility Relocations - Dense Suburban	Mile	\$	775,168				\$	-			\$	-			\$	-				\$	-	
7 Major Utility Relocations - Suburban	Mile	\$	464,896				\$	-			\$	-			\$	-				\$	-	
8 Major Utility Relocations - Undeveloped	Mile	\$	30,720				\$	-			\$	-			\$	-				\$	-	
ROW (Not Included)																						
ROW required for each segment																						
1 Dense Urban	Acre	\$	2,786,321				\$	-			\$	-			\$	-				\$	-	
2 Urban	Acre	\$	1,371,510				\$	-			\$	-			\$	-				\$	-	
3 Dense Suburban	Acre	\$	908,134				\$	-			\$	-			\$	-				\$	-	
4 Suburban	Acre	\$	208,418				\$	-			\$	-			\$	-				\$	-	
5 Undeveloped	Acre	\$	3,642				\$	-			\$	-			\$	-				\$	-	
ROW required for Temp. Construction Easement																						
1 Dense Urban	Acre						\$	-			\$	-			\$	-				\$	-	
2 Urban	Acre						\$	-			\$	-			\$	-				\$	-	
3 Dense Suburban	Acre						\$	-			\$	-			\$	-				\$	-	
4 Suburban	Acre						\$	-			\$	-			\$	-				\$	-	
5 Undeveloped	Acre						\$	-			\$	-			\$	-				\$	-	
Right-of-Way Required for Stations, Maintenance & Parking Facilities																						
6 Dense Urban	Acre	\$	2,786,321				\$	-			\$	-			\$	-				\$	-	
7 Urban	Acre	\$	1,371,510				\$	-			\$	-			\$	-				\$	-	
8 Dense Suburban	Acre	\$	908,134				\$	-			\$	-			\$	-				\$	-	
9 Suburban	Acre	\$	208,418				\$	-			\$	-			\$	-				\$	-	
10 Undeveloped	Acre	\$	3,642				\$	-			\$	-			\$	-				\$	-	
Environmental Mitigation = 3% Line Costs								\$ 2,143,853				\$ 2,346,393				\$ 125,358				\$ 667,105		
System Elements																						
1 Signaling (ATC)	Mile	\$	2,070,000			1.42	\$ 2,940,341			1.42	\$ 2,940,341			1.42	\$ 2,940,341			1.42	\$ 2,940,341			
2 Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			1.42	\$ 767,045			1.42	\$ 767,045			1.42	\$ 767,045			1.42	\$ 767,045			
3 Wayside Protection System	Mile	\$	108,000			1.42	\$ 153,409			1.42	\$ 153,409			1.42	\$ 153,409			1.42	\$ 153,409			
Electrification Items																						
1 Traction Power supply	Mile	\$	1,170,000			1.42	\$ 1,661,932			1.42	\$ 1,661,932			1.42	\$ 1,661,932			1.42	\$ 1,661,932			
2 Traction Power Distribution	Mile	\$	1,485,000			1.42	\$ 2,109,375			1.42	\$ 2,109,375			1.42	\$ 2,109,375			1.42	\$ 2,109,375			
Subtotal							\$ 81,237,707				\$ 88,191,586				\$ 11,936,056				\$ 30,536,051			
Program Implementation Costs (per screening)							\$ 20,715,615				\$ 22,488,854				\$ 3,043,694				\$ 7,786,693			
Program Implementation Costs																						
Contingencies (per screening) (25%)							\$ 20,309,427				\$ 22,047,896				\$ 2,984,014				\$ 7,634,013			
Subtotal							\$ 122,262,749					\$ 132,728,337					\$ 17,963,764					\$ 45,956,757
Subtotal (Rounded)							\$122,000,000					\$133,000,000					\$ 18,000,000					\$ 46,000,000

COST ELEMENTS			UNIT	UNIT PRICE	Open Trench				Covered Trench				Tunnel (HST only)				
Subsection 6				Base: 2009 (3rd Quarter)	C				C				C				
					Start: 1865 + 00	End: 1940 + 00	1.42 Miles		Start: 1865 + 00	End: 1940 + 00	1.42 Miles		Start: 1865 + 00	End: 1940 + 00	1.42 Miles		
Subsection Details						Quant.	Cost			Quant.	Cost			Quant.	Cost		
Double Track At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1865 + 00	End: 1940 + 00	1.42 Miles		
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Four Track Elevated (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
Four Track Tunnel (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1865 + 00	End: 1940 + 00	1.42 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
Four Track Trench (Mile)					Start: 1865 + 00	End: 1940 + 00	1.42 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
Double Track Section - Total																	
1	Double Track Section - At Grade	Mile	\$	2,100,224			0.00	\$	-		0.00	\$	-		0.00	\$	-
2	Double Track Section - On Structure	Mile	\$	4,700,160			0.00	\$	-		0.00	\$	-		0.00	\$	-
3	Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160			0.00	\$	-		0.00	\$	-		1.42	\$	6,676,364
4	Double Track Section - In Trench	Mile	\$	4,700,160			0.00	\$	-		0.00	\$	-		0.00	\$	-
Four Track Section - Total																	
	Four-track Section - At Grade	Mile	\$	4,200,448			0.00	\$	-		0.00	\$	-		0.00	\$	-
	Four-Track Section - On Structure	Mile	\$	9,400,320			0.00	\$	-		0.00	\$	-		0.00	\$	-
	Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320			0.00	\$	-		1.42	\$	13,352,727		0.00	\$	-
	Four-Track Section - In Trench	Mile	\$	9,400,320			1.42	\$	13,352,727		0.00	\$	-		0.00	\$	-
Single Track - Total																	
5	Single Track Section - At Grade	Mile	\$	1,549,312			0	\$	-		0	\$	-		0	\$	-
6	Single Track Section - On structure	Mile	\$	2,350,080			0	\$	-		0	\$	-		0	\$	-
7	Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080			0	\$	-		0	\$	-		0	\$	-
8	Single Track Section - In Trench	Mile	\$	2,350,080			0	\$	-		0	\$	-		0	\$	-
9	Freight Double Track - At Grade	Mile	\$	2,839,552			0	\$	-		0	\$	-		0	\$	-
10	Freight Single Track - At Grade	Mile	\$	1,549,312			0	\$	-		0	\$	-		0	\$	-
Earthwork Items																	
1	Site Preparation - Undeveloped	Acre	\$	9,216			18.94	\$	174,545		18.94	\$	174,545		0.00	\$	-
2	Total Cut	CY	\$	6.00			458333.33	\$	2,750,000		1222222.22	\$	7,333,333		0.00	\$	-
3	Total Fill	CY	\$	6.00			0.00	\$	-		611111.11	\$	3,666,667		0.00	\$	-
4	Borrow	CY	\$	13.00			0.00	\$	-		0.00	\$	-		0.00	\$	-
5	Spoil	CY	\$	13.00			458333.33	\$	5,958,333		611111.11	\$	7,944,444		0.00	\$	-
6	Landscape erosion Control	Acre	\$	6,144			18.94	\$	116,364		0.00	\$	-		0.00	\$	-
7	Security Fencing (Both sides of ROW)	Mile	\$	144,384			1.42	\$	205,091		0.00	\$	-		0.00	\$	-
8	Special Drainage Facilities	5% Earthwork						\$	460,217			\$	955,949			\$	-
Structures, Tunnels, Walls																	
1	Standard Structure	Mile	\$	34,972,672			0	\$	-		0	\$	-		0	\$	-
2	High Structure	Mile	\$	40,424,448				\$	-			\$	-			\$	-
3	Long Span Structure	Mile	\$	61,919,232				\$	-			\$	-			\$	-
4	Waterway Crossing - Primary	Mile	\$	85,342,208				\$	-			\$	-			\$	-
5	Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408				\$	-		0.01	\$	697,344		0.01	\$	697,344
6	Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264				\$	-			\$	-			\$	-
7	Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312				\$	-			\$	-			\$	-
8	Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896				\$	-			\$	-			\$	-
9	Double Track Drill & Blast	Mile	\$	146,887,680			0	\$	-		0	\$	-		0.00	\$	-
10	Double Track Mined (Soft Soil)	Mile	\$	79,200,000				\$	-			\$	-			\$	-
	Double Track TBM (<6 Miles)	Mile	\$	106,637,312											1.42 Miles	\$	151,473,455
	Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896													
11	Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952				\$	-			\$	-			\$	-
12	Crossovers	ea	\$	442,368				\$	-			\$	-			\$	-
13	Cut & Cover Double Track Tunnel	Mile	\$	131,246,080			0.00	\$	-		0	\$	-		0.00	\$	-
14	Trench Short	Mile	\$	78,843,904			1.42	\$	111,994,182		0.00	\$	-		0.00	\$	-
15	Trench Long	Mile	\$	57,524,224				\$	-			\$	-			\$	-
16	Mechanical & Electrical for Tunnels	Mile	\$	11,848,704			0.00	\$	-		1.42	\$	16,830,545		1.42	\$	16,830,545
17	Retaining Walls	Mile	\$	8,613,888			1.42	\$	12,235,636		0.00	\$	-		0.00	\$	-
18	Containment Walls	Mile	\$	5,907,456			1.42	\$	8,391,273		0.00	\$	-		0.00	\$	-
19	Single Track Cut and Cover Subway	Mile	\$	131,246,080				\$	-			\$	-			\$	-
	Four Track Drill & Blast	Mile	\$	293,775,360				\$	-			\$	-			\$	-
	Four Track Mined (Soft Soil)	Mile	\$	158,400,000				\$	-			\$	-		0.00	\$	-
	Four Track TBM (<6 Miles)	Mile	\$	213,274,624											0.00	\$	-
	Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792												\$	-
	Four Track Cut & Cover Tunnel	Mile	\$	262,492,160			0.00	\$	-		1.42	\$	372,858,182		0.00	\$	-
Grade Separations																	
1	Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352				\$	-			\$	-			\$	-
	Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528				\$	-			\$	-			\$	-
2	Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680				\$	-			\$	-			\$	-
3	Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568				\$	-			\$	-			\$	-
4	Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520				\$	-			\$	-			\$	-
5	Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216				\$	-			\$	-			\$	-
	Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816				\$	-			\$	-			\$	-
6	Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328				\$	-			\$	-			\$	-
7	Street Bridging HSR Trench	ea	\$	1,398,784		1	\$	1,398,784		1	\$	1,398,784		0	\$	-	-
8	Minor Crossing Closures	ea	\$	87,040				\$	-			\$	-			\$	-
Building Items																	

COST ELEMENTS			UNIT	UNIT PRICE	Open Trench				Covered Trench				Tunnel (HST only)						
Subsection 6				Base: 2009 (3rd Quarter)	C				C				C						
					Start: 1865 + 00	End: 1940 + 00	1.42 Miles		Start: 1865 + 00	End: 1940 + 00	1.42 Miles		Start: 1865 + 00	End: 1940 + 00	1.42 Miles				
Subsection Details							Quant.	Cost			Quant.	Cost			Quant.	Cost			
Double Track At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1865 + 00	End: 1940 + 00	1.42 Miles				
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles				
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles				
Four Track Elevated (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Four Track Tunnel (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1865 + 00	End: 1940 + 00	1.42 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Four Track Trench (Mile)					Start: 1865 + 00	End: 1940 + 00	1.42 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
1 Intermediate Passenger Stations	Each	\$	-					\$	-			\$	-			\$	-		
2 Terminal Passenger Stations	Each	\$	-					\$	-			\$	-			\$	-		
Caltrain Passenger Station - At-Grade	Each	\$	15,000,000					\$	-			\$	-			\$	-		
Caltrain Passenger Station - On Structure	Each	\$	15,000,000					\$	-			\$	-			\$	-		
Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000					\$	-			\$	-			\$	-		
1 Caltrain Passenger Station - In Trench	Each	\$	15,000,000				1	\$	15,000,000			1	\$	15,000,000		0	\$	-	
3 Maintenance Facility	Each	\$	123,921,884					\$	-			\$	-			\$	-		
4 Parking - Structures	space	\$	-					\$	-			\$	-			\$	-		
5 Parking - At Grade	space	\$	-					\$	-			\$	-			\$	-		
Rail & Utility Relocation																			
1 Single Track Relocation (Temporary)	Mile	\$	2,000,896					\$	-			\$	-			\$	-		
2 Single Track Relocation (Permanent)	Mile	\$	2,000,896					\$	-			\$	-			\$	-		
3 Single Track Removal	Mile	\$	130,048					\$	-			\$	-			\$	-		
4 Major Utility Relocations - Dense Urban	Mile	\$	1,548,288					\$	-			\$	-			\$	-		
5 Major Utility Relocations - Urban	Mile	\$	1,084,416					\$	-			\$	-			\$	-		
6 Major Utility Relocations - Dense Suburban	Mile	\$	775,168					\$	-			\$	-			\$	-		
7 Major Utility Relocations - Suburban	Mile	\$	464,896					\$	-			\$	-			\$	-		
8 Major Utility Relocations - Undeveloped	Mile	\$	30,720					\$	-			\$	-			\$	-		
ROW (Not Included)																			
ROW required for each segment																			
1 Dense Urban	Acre	\$	2,786,321					\$	-			\$	-			\$	-		
2 Urban	Acre	\$	1,371,510					\$	-			\$	-			\$	-		
3 Dense Suburban	Acre	\$	908,134					\$	-			\$	-			\$	-		
4 Suburban	Acre	\$	208,418					\$	-			\$	-			\$	-		
5 Undeveloped	Acre	\$	3,642					\$	-			\$	-			\$	-		
ROW required for Temp. Construction Easement																			
1 Dense Urban	Acre							\$	-			\$	-			\$	-		
2 Urban	Acre							\$	-			\$	-			\$	-		
3 Dense Suburban	Acre							\$	-			\$	-			\$	-		
4 Suburban	Acre							\$	-			\$	-			\$	-		
5 Undeveloped	Acre							\$	-			\$	-			\$	-		
Right-of-Way Required for Stations, Maintenance & Parking Facilities																			
6 Dense Urban	Acre	\$	2,786,321					\$	-			\$	-			\$	-		
7 Urban	Acre	\$	1,371,510					\$	-			\$	-			\$	-		
8 Dense Suburban	Acre	\$	908,134					\$	-			\$	-			\$	-		
9 Suburban	Acre	\$	208,418					\$	-			\$	-			\$	-		
10 Undeveloped	Acre	\$	3,642					\$	-			\$	-			\$	-		
Environmental Mitigation = 3% Line Costs								\$	5,161,115			\$	13,206,376			\$	5,270,331		
System Elements																			
1 Signaling (ATC)	Mile	\$	2,070,000				1.42	\$	2,940,341			1.42	\$	2,940,341		1.42	\$	2,940,341	
2 Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000				1.42	\$	767,045			1.42	\$	767,045		1.42	\$	767,045	
3 Wayside Protection System	Mile	\$	108,000				1.42	\$	153,409			1.42	\$	153,409		1.42	\$	153,409	
Electrification Items																			
1 Traction Power supply	Mile	\$	1,170,000				1.42	\$	1,661,932			1.42	\$	1,661,932		1.42	\$	1,661,932	
2 Traction Power Distribution	Mile	\$	1,485,000				1.42	\$	2,109,375			1.42	\$	2,109,375		1.42	\$	2,109,375	
Subtotal								\$	184,830,369			\$	461,051,000			\$	188,580,141		
Program Implementation Costs (per screening)								\$	47,131,744			\$	117,568,005			\$	48,087,936		
Program Implementation Costs																			
Contingencies (per screening) (25%)								\$	46,207,592			\$	115,262,750			\$	47,145,035		
Subtotal								\$	278,169,705				\$	693,881,755				\$	283,813,112
Subtotal (Rounded)								\$	278,000,000				\$	694,000,000				\$	284,000,000

COST ELEMENTS			UNIT	UNIT PRICE	Elevated Viaduct (2 tracks)				Elevated Viaduct (4 tracks)				At-Grade (2 tracks)				At-Grade (4 tracks)			
Subsection 6			Base: 2009 (3rd Quarter)		D				D				D				D			
					Start: 1940 + 00	End: 1970 + 00	0.57 Miles		Start: 1940 + 00	End: 1970 + 00	0.57 Miles		Start: 1940 + 00	End: 1970 + 00	0.57 Miles		Start: 1940 + 00	End: 1970 + 00	0.57 Miles	
							Quant.	Cost			Quant.	Cost			Quant.	Cost			Quant.	Cost
Subsection Details					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1940 + 00	End: 1970 + 00	0.57 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track At-Grade (Mile)					Start: 1940 + 00	End: 1970 + 00	0.57 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1940 + 00	End: 1970 + 00	0.57 Miles	
Four Track Elevated (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1940 + 00	End: 1970 + 00	0.57 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Section - Total																				
1 Double Track Section - At Grade	Mile	\$	2,100,224				0 \$	-			0 \$	-			0.57 \$	1,193,309			0.00 \$	-
2 Double Track Section - On Structure	Mile	\$	4,700,160				0.57 \$	2,670,545			0 \$	-			0.00 \$	-			0.00 \$	-
3 Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160				0 \$	-			0 \$	-			0.00 \$	-			0.00 \$	-
4 Double Track Section - In Trench	Mile	\$	4,700,160				0 \$	-			0 \$	-			0.00 \$	-			0.00 \$	-
Four Track Section - Total																				
Four-track Section - At Grade	Mile	\$	4,200,448				0.00 \$	-			0.00 \$	-			0.00 \$	-			0.57 \$	2,386,618
Four-Track Section - On Structure	Mile	\$	9,400,320				0.00 \$	-			0.57 \$	5,341,091			0 \$	-			0 \$	-
Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320				0 \$	-			0 \$	-			0 \$	-			0 \$	-
Four-Track Section - In Trench	Mile	\$	9,400,320				0 \$	-			0 \$	-			0 \$	-			0 \$	-
Single Track - Total																				
5 Single Track Section - At Grade	Mile	\$	1,549,312				0 \$	-			0 \$	-			0 \$	-			0 \$	-
6 Single Track Section - On structure	Mile	\$	2,350,080				0 \$	-			0 \$	-			0 \$	-			0 \$	-
7 Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080				0 \$	-			0 \$	-			0 \$	-			0 \$	-
8 Single Track Section - In Trench	Mile	\$	2,350,080				0 \$	-			0 \$	-			0 \$	-			0 \$	-
9 Freight Double Track - At Grade	Mile	\$	2,839,552				0 \$	-			0 \$	-			0 \$	-			0 \$	-
10 Freight Single Track - At Grade	Mile	\$	1,549,312				0 \$	-			0 \$	-			0 \$	-			0 \$	-
Earthwork Items																				
1 Site Preparation - Undeveloped	Acre	\$	9,216				4.48 \$	41,256			7.58 \$	69,818			0.00 \$	-			0.00 \$	-
2 Total Cut	CY	\$	6.00				0.00 \$	-			0.00 \$	-			0.00 \$	-			0.00 \$	-
3 Total Fill	CY	\$	6.00				0.00 \$	-			0.00 \$	-			0.00 \$	-			0.00 \$	-
4 Borrow	CY	\$	13.00				0.00 \$	-			0.00 \$	-			0.00 \$	-			0.00 \$	-
5 Spoil	CY	\$	13.00				0.00 \$	-			0.00 \$	-			0.00 \$	-			0.00 \$	-
6 Landscape erosion Control	Acre	\$	6,144				0.00 \$	-			0.00 \$	-			0.00 \$	-			0.00 \$	-
7 Security Fencing (Both sides of ROW)	Mile	\$	144,384				0.00 \$	-			0.00 \$	-			0.57 \$	82,036			0.57 \$	82,036
8 Special Drainage Facilities	5% Earthwork						\$	2,063			\$	3,491			\$	4,102			\$	4,102
Structures, Tunnels, Walls																				
1 Standard Structure	Mile	\$	34,972,672				0.57 \$	19,870,836			0.57 \$	19,870,836			0.00 \$	-			0.00 \$	-
2 High Structure	Mile	\$	40,424,448				\$	-			\$	-			\$	-			\$	-
3 Long Span Structure	Mile	\$	61,919,232				\$	-			\$	-			\$	-			\$	-
4 Waterway Crossing - Primary	Mile	\$	85,342,208				\$	-			\$	-			\$	-			\$	-
5 Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408				\$	-			\$	-			0.01 \$	871,680			0.01 \$	871,680
6 Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264				\$	-			\$	-			\$	-			\$	-
7 Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312				\$	-			\$	-			\$	-			\$	-
8 Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896				\$	-			\$	-			\$	-			\$	-
9 Double Track Drill & Blast	Mile	\$	146,887,680				0 \$	-			0 \$	-			0 \$	-			0 \$	-
10 Double Track Mined (Soft Soil)	Mile	\$	79,200,000				\$	-			\$	-			\$	-			\$	-
Double Track TBM (<6 Miles)	Mile	\$	106,637,312				\$	-			\$	-			\$	-			\$	-
Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896				\$	-			\$	-			\$	-			\$	-
11 Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952				\$	-			\$	-			\$	-			\$	-
12 Crossovers	ea	\$	442,368				\$	-			\$	-			\$	-			\$	-
13 Cut & Cover Double Track Tunnel	Mile	\$	131,246,080				0 \$	-			0 \$	-			0 \$	-			0 \$	-
14 Trench Short	Mile	\$	78,843,904				0 \$	-			0 \$	-			0 \$	-			0 \$	-
15 Trench Long	Mile	\$	57,524,224				\$	-			\$	-			\$	-			\$	-
16 Mechanical & Electrical for Tunnels	Mile	\$	11,848,704				0 \$	-			0 \$	-			0 \$	-			0 \$	-
17 Retaining Walls	Mile	\$	8,613,888				0 \$	-			0 \$	-			0 \$	-			0 \$	-
18 Containment Walls	Mile	\$	5,907,456				0 \$	-			0 \$	-			0 \$	-			0 \$	-
19 Single Track Cut and Cover Subway	Mile	\$	131,246,080				\$	-			\$	-			\$	-			\$	-
Four Track Drill & Blast	Mile	\$	293,775,360				\$	-			\$	-			\$	-			\$	-
Four Track Mined (Soft Soil)	Mile	\$	158,400,000				\$	-			\$	-			\$	-			\$	-
Four Track TBM (<6 Miles)	Mile	\$	213,274,624				\$	-			\$	-			\$	-			\$	-
Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792				\$	-			\$	-			\$	-			\$	-
Four Track Cut & Cover Tunnel	Mile	\$	262,492,160				0.00 \$	-			0.00 \$	-			0.00 \$	-			0.00 \$	-
Grade Separations																				
1 Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352				\$	-			\$	-			\$	-			\$	-
Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528				\$	-			\$	-			2 \$	39,853,056			2 \$	39,853,056
2 Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680				\$	-			\$	-			\$	-			\$	-
3 Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568				\$	-			\$	-			\$	-			\$	-
4 Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520				\$	-			\$	-			\$	-			\$	-
5 Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216				\$	-			\$	-			\$	-			\$	-
Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816				\$	-			\$	-			\$	-			\$	-
6 Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328				\$	-			\$	-			\$	-			\$	-
7 Street Bridging HSR Trench	ea	\$	1,398,784				\$	-			\$	-			\$	-			\$	-
8 Minor Crossing Closures	ea	\$	87,040				\$	-			\$	-			\$	-			\$	-

COST ELEMENTS			UNIT	UNIT PRICE	Elevated Viaduct (2 tracks)				Elevated Viaduct (4 tracks)				At-Grade (2 tracks)				At-Grade (4 tracks)				
Subsection 6				Base: 2009 (3rd Quarter)	D				D				D				D				
					Start: 1940 + 00	End: 1970 + 00	0.57 Miles		Start: 1940 + 00	End: 1970 + 00	0.57 Miles		Start: 1940 + 00	End: 1970 + 00	0.57 Miles		Start: 1940 + 00	End: 1970 + 00	0.57 Miles		
Subsection Details							Quant.	Cost			Quant.	Cost			Quant.	Cost			Quant.	Cost	
Double Track At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1940 + 00	End: 1970 + 00	0.57 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
Double Track Elevated (Mile)					Start: 1940 + 00	End: 1970 + 00	0.57 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1940 + 00	End: 1970 + 00	0.57 Miles		
Four Track Elevated (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1940 + 00	End: 1970 + 00	0.57 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
1	Building Items																				
2	Intermediate Passenger Stations	Each	\$	-				\$	-			\$	-			\$	-			\$	-
	Terminal Passenger Stations	Each	\$	-				\$	-			\$	-			\$	-			\$	-
	Caltrain Passenger Station - At-Grade	Each	\$	15,000,000				\$	-			\$	-			\$	-			\$	-
	Caltrain Passenger Station - On Structure	Each	\$	15,000,000				\$	-			\$	-			\$	-			\$	-
	Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000				\$	-			\$	-			\$	-			\$	-
	Caltrain Passenger Station - In Trench	Each	\$	15,000,000				\$	-			\$	-			\$	-			\$	-
3	Maintenance Facility	Each	\$	123,921,884				\$	-			\$	-			\$	-			\$	-
4	Parking - Structures	space	\$	-				\$	-			\$	-			\$	-			\$	-
5	Parking - At Grade	space	\$	-				\$	-			\$	-			\$	-			\$	-
Rail & Utility Relocation																					
1	Single Track Relocation (Temporary)	Mile	\$	2,000,896				\$	-			\$	-			\$	-			\$	-
2	Single Track Relocation (Permanent)	Mile	\$	2,000,896				\$	-			\$	-			\$	-			\$	-
3	Single Track Removal	Mile	\$	130,048				\$	-			\$	-			\$	-			\$	-
4	Major Utility Relocations - Dense Urban	Mile	\$	1,548,288				\$	-			\$	-			\$	-			\$	-
5	Major Utility Relocations - Urban	Mile	\$	1,084,416				\$	-			\$	-			\$	-			\$	-
6	Major Utility Relocations - Dense Suburban	Mile	\$	775,168				\$	-			\$	-			\$	-			\$	-
7	Major Utility Relocations - Suburban	Mile	\$	464,896				\$	-			\$	-			\$	-			\$	-
8	Major Utility Relocations - Undeveloped	Mile	\$	30,720				\$	-			\$	-			\$	-			\$	-
ROW (Not Included)																					
ROW required for each segment																					
1	Dense Urban	Acre	\$	2,786,321				\$	-			\$	-			\$	-			\$	-
2	Urban	Acre	\$	1,371,510				\$	-			\$	-			\$	-			\$	-
3	Dense Suburban	Acre	\$	908,134				\$	-			\$	-			\$	-			\$	-
4	Suburban	Acre	\$	208,418				\$	-			\$	-			\$	-			\$	-
5	Undeveloped	Acre	\$	3,642				\$	-			\$	-			\$	-			\$	-
ROW required for Temp. Construction Easement																					
1	Dense Urban	Acre						\$	-			\$	-			\$	-			\$	-
2	Urban	Acre						\$	-			\$	-			\$	-			\$	-
3	Dense Suburban	Acre						\$	-			\$	-			\$	-			\$	-
4	Suburban	Acre						\$	-			\$	-			\$	-			\$	-
5	Undeveloped	Acre						\$	-			\$	-			\$	-			\$	-
Right-of-Way Required for Stations, Maintenance & Parking Facilities																					
6	Dense Urban	Acre	\$	2,786,321				\$	-			\$	-			\$	-			\$	-
7	Urban	Acre	\$	1,371,510				\$	-			\$	-			\$	-			\$	-
8	Dense Suburban	Acre	\$	908,134				\$	-			\$	-			\$	-			\$	-
9	Suburban	Acre	\$	208,418				\$	-			\$	-			\$	-			\$	-
10	Undeveloped	Acre	\$	3,642				\$	-			\$	-			\$	-			\$	-
Environmental Mitigation = 3% Line Costs								\$ 677,541				\$ 758,557				\$ 1,260,125				\$ 1,295,925	
System Elements																					
1	Signaling (ATC)	Mile	\$	2,070,000			0.57	\$ 1,176,136			0.57	\$ 1,176,136			0.57	\$ 1,176,136			0.57	\$ 1,176,136	
2	Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			0.57	\$ 306,818			0.57	\$ 306,818			0.57	\$ 306,818			0.57	\$ 306,818	
3	Wayside Protection System	Mile	\$	108,000			0.57	\$ 61,364			0.57	\$ 61,364			0.57	\$ 61,364			0.57	\$ 61,364	
Electrification Items																					
1	Traction Power supply	Mile	\$	1,170,000			0.57	\$ 664,773			0.57	\$ 664,773			0.57	\$ 664,773			0.57	\$ 664,773	
2	Traction Power Distribution	Mile	\$	1,485,000			0.57	\$ 843,750			0.57	\$ 843,750			0.57	\$ 843,750			0.57	\$ 843,750	
Subtotal								\$ 26,315,083				\$ 29,096,634				\$ 46,317,150				\$ 47,546,258	
Program Implementation Costs (per screening)								\$ 6,710,346				\$ 7,419,642				\$ 11,810,873				\$ 12,124,296	
Program Implementation Costs																					
Contingencies (per screening) (25%)								\$ 6,578,771				\$ 7,274,159				\$ 11,579,287				\$ 11,886,565	
Subtotal								\$ 39,604,200				\$ 43,790,435				\$ 69,707,310				\$ 71,557,118	
Subtotal (Rounded)								\$ 40,000,000				\$ 44,000,000				\$ 70,000,000				\$ 72,000,000	

COST ELEMENTS			UNIT	UNIT PRICE	Open Trench				Covered Trench				Tunnel (HST only)				
Subsection 6			Base: 2009 (3rd Quarter)	D				D				D					
				Start: 1940 + 00	End: 1970 + 00	0.57 Miles		Start: 1940 + 00	End: 1970 + 00	0.57 Miles		Start: 1940 + 00	End: 1970 + 00	0.57 Miles			
Subsection Details						Quant.	Cost			Quant.	Cost			Quant.	Cost		
Double Track At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Double Track Elevated (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Double Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1940 + 00	End: 1970 + 00	0.57 Miles			
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Elevated (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Tunnel (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1940 + 00	End: 1970 + 00	0.57 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Trench (Mile)				Start: 1940 + 00	End: 1970 + 00	0.57 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
1	Double Track Section - Total																
2	Double Track Section - At Grade	Mile	\$	2,100,224			0.00	\$	-			0.00	\$	-	0.00	\$	-
3	Double Track Section - On Structure	Mile	\$	4,700,160			0.00	\$	-			0.00	\$	-	0.00	\$	-
4	Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160			0.00	\$	-			0.00	\$	-	0.57	\$	2,670,545
5	Double Track Section - In Trench	Mile	\$	4,700,160			0.00	\$	-			0.00	\$	-	0.00	\$	-
Four Track Section - Total																	
	Four-track Section - At Grade	Mile	\$	4,200,448			0.00	\$	-			0.00	\$	-	0.00	\$	-
	Four-Track Section - On Structure	Mile	\$	9,400,320			0.00	\$	-			0.00	\$	-	0.00	\$	-
	Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320			0.00	\$	-			0.57	\$	5,341,091	0.00	\$	-
	Four-Track Section - In Trench	Mile	\$	9,400,320			0.57	\$	5,341,091			0.00	\$	-	0.00	\$	-
Single Track - Total																	
5	Single Track Section - At Grade	Mile	\$	1,549,312			0	\$	-			0	\$	-	0	\$	-
6	Single Track Section - On structure	Mile	\$	2,350,080			0	\$	-			0	\$	-	0	\$	-
7	Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080			0	\$	-			0	\$	-	0	\$	-
8	Single Track Section - In Trench	Mile	\$	2,350,080			0	\$	-			0	\$	-	0	\$	-
9	Freight Double Track - At Grade	Mile	\$	2,839,552			0	\$	-			0	\$	-	0	\$	-
10	Freight Single Track - At Grade	Mile	\$	1,549,312			0	\$	-			0	\$	-	0	\$	-
Earthwork Items																	
1	Site Preparation - Undeveloped	Acre	\$	9,216			7.58	\$	69,818			7.58	\$	69,818	0.00	\$	-
2	Total Cut	CY	\$	6.00			488888.89	\$	2,933,333			488888.89	\$	2,933,333	0.00	\$	-
3	Total Fill	CY	\$	6.00			0.00	\$	-			244444.44	\$	1,466,667	0.00	\$	-
4	Borrow	CY	\$	13.00			0.00	\$	-			0.00	\$	-	0.00	\$	-
5	Spoil	CY	\$	13.00			488888.89	\$	6,355,556			244444.44	\$	3,177,778	0.00	\$	-
6	Landscape erosion Control	Acre	\$	6,144			7.58	\$	46,545			0.00	\$	-	0.00	\$	-
7	Security Fencing (Both sides of ROW)	Mile	\$	144,384			0.57	\$	82,036			0.00	\$	-	0.00	\$	-
8	Special Drainage Facilities	5% Earthwork						\$	474,364				\$	382,380		\$	-
Structures, Tunnels, Walls																	
1	Standard Structure	Mile	\$	34,972,672			0	\$	-			0	\$	-	0	\$	-
2	High Structure	Mile	\$	40,424,448				\$	-				\$	-		\$	-
3	Long Span Structure	Mile	\$	61,919,232				\$	-				\$	-		\$	-
4	Waterway Crossing - Primary	Mile	\$	85,342,208				\$	-				\$	-		\$	-
5	Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408			0.01	\$	697,344			0.01	\$	697,344	0.01	\$	697,344
6	Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264				\$	-				\$	-		\$	-
7	Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312				\$	-				\$	-		\$	-
8	Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896				\$	-				\$	-		\$	-
9	Double Track Drill & Blast	Mile	\$	146,887,680			0	\$	-			0	\$	-	0.00	\$	-
10	Double Track Mined (Soft Soil)	Mile	\$	79,200,000				\$	-				\$	-	0.00	\$	-
	Double Track TBM (<6 Miles)	Mile	\$	106,637,312											0.57	\$	60,589,382
	Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896													
11	Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952				\$	-				\$	-		\$	-
12	Crossovers	ea	\$	442,368				\$	-				\$	-		\$	-
13	Cut & Cover Double Track Tunnel	Mile	\$	131,246,080			0	\$	-			0	\$	-	0.00	\$	-
14	Trench Short	Mile	\$	78,843,904			0.57	\$	44,797,673			0.00	\$	-	0.00	\$	-
15	Trench Long	Mile	\$	57,524,224				\$	-				\$	-		\$	-
16	Mechanical & Electrical for Tunnels	Mile	\$	11,848,704			0.00	\$	-			0.57	\$	6,732,218	0.57	\$	6,732,218
17	Retaining Walls	Mile	\$	8,613,888			0.57	\$	4,894,255			0.00	\$	-	0.00	\$	-
18	Containment Walls	Mile	\$	5,907,456			0.57	\$	3,356,509			0.00	\$	-	0.00	\$	-
19	Single Track Cut and Cover Subway	Mile	\$	131,246,080				\$	-				\$	-		\$	-
	Four Track Drill & Blast	Mile	\$	293,775,360				\$	-				\$	-		\$	-
	Four Track Mined (Soft Soil)	Mile	\$	158,400,000				\$	-				\$	-		\$	-
	Four Track TBM (<6 Miles)	Mile	\$	213,274,624											0.00	\$	-
	Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792											0.00	\$	-
	Four Track Cut & Cover Tunnel	Mile	\$	262,492,160			0.00	\$	-			0.57	\$	149,143,273	0.00	\$	-
Grade Separations																	
1	Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352				\$	-				\$	-		\$	-
	Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528				\$	-				\$	-		\$	-
2	Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680				\$	-				\$	-		\$	-
3	Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568				\$	-				\$	-		\$	-
4	Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520				\$	-				\$	-		\$	-
5	Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216				\$	-				\$	-		\$	-
	Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816				\$	-				\$	-		\$	-
6	Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328				\$	-				\$	-		\$	-
7	Street Bridging HSR Trench	ea	\$	1,398,784				\$	-			2	\$	2,797,568		\$	-
8	Minor Crossing Closures	ea	\$	87,040				\$	-				\$	-		\$	-

COST ELEMENTS			UNIT	UNIT PRICE	Open Trench				Covered Trench				Tunnel (HST only)					
Subsection 6				Base: 2009 (3rd Quarter)	D				D				D					
					Start: 1940 + 00	End: 1970 + 00	0.57 Miles		Start: 1940 + 00	End: 1970 + 00	0.57 Miles		Start: 1940 + 00	End: 1970 + 00	0.57 Miles			
Subsection Details							Quant.	Cost			Quant.	Cost			Quant.	Cost		
Double Track At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1940 + 00	End: 1970 + 00	0.57 Miles			
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Elevated (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Tunnel (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1940 + 00	End: 1970 + 00	0.57 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Trench (Mile)					Start: 1940 + 00	End: 1970 + 00	0.57 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
1	Building Items																	
1	Intermediate Passenger Stations	Each	\$	-				\$	-			\$	-			\$	-	
2	Terminal Passenger Stations	Each	\$	-				\$	-			\$	-			\$	-	
	Caltrain Passenger Station - At-Grade	Each	\$	15,000,000				\$	-			\$	-			\$	-	
	Caltrain Passenger Station - On Structure	Each	\$	15,000,000				\$	-			\$	-			\$	-	
	Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000				\$	-			\$	-			\$	-	
	Caltrain Passenger Station - In Trench	Each	\$	15,000,000				\$	-			\$	-			\$	-	
3	Maintenance Facility	Each	\$	123,921,884				\$	-			\$	-			\$	-	
4	Parking - Structures	space	\$	-				\$	-			\$	-			\$	-	
5	Parking - At Grade	space	\$	-				\$	-			\$	-			\$	-	
Rail & Utility Relocation																		
1	Single Track Relocation (Temporary)	Mile	\$	2,000,896				\$	-			\$	-			\$	-	
2	Single Track Relocation (Permanent)	Mile	\$	2,000,896				\$	-			\$	-			\$	-	
3	Single Track Removal	Mile	\$	130,048				\$	-			\$	-			\$	-	
4	Major Utility Relocations - Dense Urban	Mile	\$	1,548,288				\$	-			\$	-			\$	-	
5	Major Utility Relocations - Urban	Mile	\$	1,084,416				\$	-			\$	-			\$	-	
6	Major Utility Relocations - Dense Suburban	Mile	\$	775,168				\$	-			\$	-			\$	-	
7	Major Utility Relocations - Suburban	Mile	\$	464,896				\$	-			\$	-			\$	-	
8	Major Utility Relocations - Undeveloped	Mile	\$	30,720				\$	-			\$	-			\$	-	
ROW (Not Included)																		
ROW required for each segment																		
1	Dense Urban	Acre	\$	2,786,321				\$	-			\$	-			\$	-	
2	Urban	Acre	\$	1,371,510				\$	-			\$	-			\$	-	
3	Dense Suburban	Acre	\$	908,134				\$	-			\$	-			\$	-	
4	Suburban	Acre	\$	208,418				\$	-			\$	-			\$	-	
5	Undeveloped	Acre	\$	3,642				\$	-			\$	-			\$	-	
ROW required for Temp. Construction Easement																		
1	Dense Urban	Acre						\$	-			\$	-			\$	-	
2	Urban	Acre						\$	-			\$	-			\$	-	
3	Dense Suburban	Acre						\$	-			\$	-			\$	-	
4	Suburban	Acre						\$	-			\$	-			\$	-	
5	Undeveloped	Acre						\$	-			\$	-			\$	-	
Right-of-Way Required for Stations, Maintenance & Parking Facilities																		
6	Dense Urban	Acre	\$	2,786,321				\$	-			\$	-			\$	-	
7	Urban	Acre	\$	1,371,510				\$	-			\$	-			\$	-	
8	Dense Suburban	Acre	\$	908,134				\$	-			\$	-			\$	-	
9	Suburban	Acre	\$	208,418				\$	-			\$	-			\$	-	
10	Undeveloped	Acre	\$	3,642				\$	-			\$	-			\$	-	
Environmental Mitigation = 3% Line Costs								\$	2,071,456			\$	5,182,244			\$	2,120,685	
System Elements																		
1	Signaling (ATC)	Mile	\$	2,070,000			0.57	\$	1,176,136			0.57	\$	1,176,136		0.57	\$	1,176,136
2	Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			0.57	\$	306,818			0.57	\$	306,818		0.57	\$	306,818
3	Wayside Protection System	Mile	\$	108,000			0.57	\$	61,364			0.57	\$	61,364		0.57	\$	61,364
Electrification Items																		
1	Traction Power supply	Mile	\$	1,170,000			0.57	\$	664,773			0.57	\$	664,773		0.57	\$	664,773
2	Traction Power Distribution	Mile	\$	1,485,000			0.57	\$	843,750			0.57	\$	843,750		0.57	\$	843,750
Subtotal								\$	74,172,821			\$	180,976,555			\$	75,863,015	
Program Implementation Costs (per screening)								\$	18,914,069			\$	46,149,021			\$	19,345,069	
Program Implementation Costs																		
Contingencies (per screening) (25%)								\$	18,543,205			\$	45,244,139			\$	18,965,754	
Subtotal								\$	111,630,096			\$	272,369,715			\$	114,173,838	
Subtotal (Rounded)								\$	112,000,000			\$	272,000,000			\$	114,000,000	

Subsection 7	7A & 7B (2.9 miles)				7C & 7D (2.8 miles)			
	Aerial Viaduct	At Grade	Open Trench	Covered Trench/Tunnel	Aerial Viaduct	At Grade	Open Trench	Covered Trench/Tunnel
Capital Cost (\$2009 in Millions) does not include ROW	\$344	\$155	\$615	\$1,433	\$99	\$107	\$540	\$1,323
Acquisition Cost of Permanent ROW	Medium	Highest	Medium	Lowest	Medium	Highest	Medium	Lowest
Notes:	1. Caltrain San Antonio and Mountain View stations. 2. Potential HST Mountain View station (costs not included). 3. Convert Shoreline Blvd to an underpass.	1. Caltrain San Antonio and Mountain View stations. 2. Potential HST Mountain View station (costs not included). 3. Grade separation at Rengstorff Ave and Castro St.	1. Caltrain San Antonio and Mountain View stations. 2. Potential HST Mountain View station (costs not included).	1. Caltrain San Antonio and Mountain View stations. 2. Potential HST Mountain View station (costs not included).	1. Caltrain Sunnyvale station. 2. Aerial only in the vicinity of Mary Ave.	1. Caltrain Sunnyvale station. 2. Grade separations at Mary Ave and Sunnyvale Ave.	1. Caltrain Sunnyvale station.	1. Caltrain Sunnyvale station.

COST ELEMENTS			UNIT	UNIT PRICE	Elevated Viaduct			At-Grade			Open Trench			Covered Trench							
Subsection 7				Base: 2009 (3rd Quarter)	A			A			A			A							
					Start: 1970 + 00	End: 2025 + 00	1.04 Miles	Start: 1970 + 00	End: 2025 + 00	1.04 Miles	Start: 1970 + 00	End: 2025 + 00	1.04 Miles	Start: 1970 + 00	End: 2025 + 00	1.04 Miles					
Subsection Dedtails							Quant.	Cost			Quant.	Cost			Quant.	Cost					
Double Track At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1970 + 00	End: 2025 + 00	1.04 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Four Track Elevated (Mile)					Start: 1970 + 00	End: 2025 + 00	1.04 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1970 + 00	End: 2025 + 00	1.04 Miles		
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1970 + 00	End: 2025 + 00	1.04 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
Double Track Section - Total																					
1 Double Track Section - At Grade					Mile	\$	2,100,224				1.04	\$	2,187,733			0.00	\$	-	0	\$	-
2 Double Track Section - On Structure					Mile	\$	4,700,160				0.00	\$	-			0.00	\$	-	0	\$	-
3 Double Track Section - In Tunnel or Subway					Mile	\$	4,700,160				0.00	\$	-			0.00	\$	-	0	\$	-
4 Double Track Section - In Trench					Mile	\$	4,700,160				0.00	\$	-			0.00	\$	-	0	\$	-
Four Track Section - Total																					
Four-track Section - At Grade					Mile	\$	4,200,448				0.00	\$	-			0.00	\$	-	0.00	\$	-
Four-Track Section - On Structure					Mile	\$	9,400,320				0	\$	-			0.00	\$	-	0.00	\$	-
Four-Track Section - In Tunnel or Subway					Mile	\$	9,400,320				0	\$	-			0.00	\$	-	1.04	\$	9,792,000
Four-Track Section - In Trench					Mile	\$	9,400,320				0	\$	-			1.04	\$	9,792,000	0.00	\$	-
Single Track - Total																					
5 Single Track Section - At Grade					Mile	\$	1,549,312				0	\$	-			0	\$	-	0	\$	-
6 Single Track Section - On Structure					Mile	\$	2,350,080				0	\$	-			0	\$	-	0	\$	-
7 Single Track Section - In Tunnel or Subway					Mile	\$	2,350,080				0	\$	-			0	\$	-	0	\$	-
8 Single Track Section - In Trench					Mile	\$	2,350,080				0	\$	-			0	\$	-	0	\$	-
9 Freight Double Track - At Grade					Mile	\$	2,839,552				0	\$	-			0	\$	-	0	\$	-
10 Freight Single Track - At Grade					Mile	\$	1,549,312				0	\$	-			0	\$	-	0	\$	-
Earthwork Items																					
1 Site Preparation - Undeveloped					Acre	\$	9,216				13.89	\$	128,000			13.89	\$	128,000	13.89	\$	128,000
2 Total Cut					CY	\$	6.45				0	\$	-			448148.15	\$	2,891,093	1120370.37	\$	7,227,733
3 Total Fill					CY	\$	6.29				0	\$	-			0.00	\$	-	672222.22	\$	4,228,224
4 Borrow					CY	\$	12.58				0.00	\$	-			0.00	\$	-	0.00	\$	-
5 Spoil					CY	\$	12.58				0.00	\$	-			448148.15	\$	5,637,632	448148.15	\$	5,637,632
6 Landscape erosion Control					Acre	\$	6,144				0.00	\$	-			13.89	\$	85,333	0.00	\$	-
7 Security Fencing (Both sides of ROW)					Mile	\$	144,384				0.00	\$	-			1.04	\$	150,400	0.00	\$	-
8 Special Drainage Facilities					5% Earthwork						\$	6,400			\$	444,623			\$	861,079	
Structures, Tunnels, Walls																					
1 Standard Structure					Mile	\$	34,972,672				1.04	\$	36,429,867			0	\$	-	0.00	\$	-
2 High Structure					Mile	\$	40,424,448					\$	-				\$	-		\$	-
3 Long Span Structure					Mile	\$	61,919,232					\$	-				\$	-		\$	-
4 Waterway Crossing - Primary					Mile	\$	85,342,208					\$	-				\$	-		\$	-
5 Waterway Crossing - Secondary (Irrigation Canal)					Mile	\$	92,049,408				0.02	\$	1,743,360			0.01	\$	871,680		\$	-
6 Twin Single Track Drill&Blast (<6 Miles)					Mile	\$	142,731,264					\$	-				\$	-		\$	-
7 Twin Single Track TBM (<6 Miles)					Mile	\$	106,637,312					\$	-				\$	-		\$	-
8 Twin Single Track TBM w/3rd Tube (<6 Miles)					Mile	\$	176,720,896					\$	-				\$	-		\$	-
9 Double Track Drill & Blast					Mile	\$	146,887,680				0.00	\$	-			0	\$	-	0.00	\$	-
10 Double Track Mined (Soft Soil)					Mile	\$	792,000,000					\$	-				\$	-		\$	-
Double Track TBM (<6 Miles)					Mile	\$	106,637,312					\$	-				\$	-		\$	-
Double Track TBM w/3rd Tube (>6 Miles)					Mile	\$	176,720,896					\$	-				\$	-		\$	-
11 Seismic Chamber (Drill & Blast/Mined)					ea	\$	126,205,952					\$	-				\$	-		\$	-
12 Crossovers					ea	\$	442,368					\$	-				\$	-		\$	-
13 Cut & Cover Double Track Tunnel					Mile	\$	131,246,080				0.00	\$	-			0	\$	-	0.00	\$	-
14 Trench Short					Mile	\$	78,843,904				0.00	\$	-			1.04	\$	82,129,067	0.00	\$	-
15 Trench Long					Mile	\$	57,524,224					\$	-				\$	-		\$	-
16 Mechanical & Electrical for Tunnels					Mile	\$	11,848,704				0.00	\$	-			0.00	\$	-	1.04	\$	12,342,400
17 Retaining Walls					Mile	\$	8,613,888				0.00	\$	-			1.04	\$	8,972,800	0.00	\$	-
18 Containment Walls					Mile	\$	5,907,456				0.00	\$	-			1.04	\$	6,153,600	0.00	\$	-
19 Single Track Cut and Cover Subway					Mile	\$	131,246,080					\$	-				\$	-		\$	-
Four Track Drill & Blast					Mile	\$	293,775,360					\$	-				\$	-		\$	-
Four Track Mined (Soft Soil)					Mile	\$	1,584,000,000					\$	-				\$	-		\$	-
Four Track TBM (<6 Miles)					Mile	\$	213,274,624					\$	-				\$	-		\$	-
Four Track TBM w/3rd Tube (>6 Miles)					Mile	\$	353,441,792					\$	-				\$	-		\$	-
Four Track Cut & Cover Tunnel					Mile	\$	262,492,160				0.00	\$	-			0.00	\$	-	1.04	\$	273,429,333
Grade Separations																					
1 Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)					ea	\$	13,284,352					\$	-				\$	-		\$	-
Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)					ea	\$	19,926,528				1	\$	19,926,528			0	\$	-		\$	-
2 Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)					ea	\$	2,759,680					\$	-				\$	-		\$	-
3 Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)					ea	\$	2,029,568					\$	-				\$	-		\$	-
4 Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)					ea	\$	3,563,520				0	\$	-				\$	-		\$	-
5 Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)					ea	\$	3,593,216					\$	-				\$	-		\$	-
Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)					ea	\$	2,850,816					\$	-				\$	-		\$	-
6 Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)					ea	\$	3,171,328					\$	-				\$	-		\$	-
7 Street Bridging HSR Trench					ea	\$	1,398,784					\$	-			3	\$	4,196,352		\$	-
8 Minor Crossing Closures					ea	\$	87,040					\$	-				\$	-		\$	-
Building Items																					

COST ELEMENTS			UNIT	UNIT PRICE	Elevated Viaduct				At-Grade				Open Trench				Covered Trench			
Subsection 7			Base: 2009 (3rd Quarter)	A				A				A				A				
				Start: 1970 + 00	End: 2025 + 00	1.04 Miles		Start: 1970 + 00	End: 2025 + 00	1.04 Miles		Start: 1970 + 00	End: 2025 + 00	1.04 Miles		Start: 1970 + 00	End: 2025 + 00	1.04 Miles		
Subsection Dedtails					Quant.	Cost			Quant.	Cost			Quant.	Cost			Quant.	Cost		
Double Track At-Grade (Mile)			Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 1970 + 00	End: 2025 + 00	1.04 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Double Track Elevated (Mile)			Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles							
Double Track Tunnel (Mile)			Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles							
Double Track Trench (Mile)			Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles							
Four Track Construction/Reconstruction At-Grade (Mile)			Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Elevated (Mile)			Start: 1970 + 00	End: 2025 + 00	1.04 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles							
Four Track Tunnel (Mile)			Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles							
Four Track Trench (Mile)			Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 1970 + 00	End: 2025 + 00	1.04 Miles							
1 Intermediate Passenger Stations	Each	\$	-			\$	-			\$	-			\$	-			\$	-	
2 Terminal Passenger Stations	Each	\$	-			\$	-			\$	-			\$	-			\$	-	
Caltrain Passenger Station - At-Grade	Each	\$15,000,000				\$	-		1	15,000,000				\$	-			\$	-	
Caltrain Passenger Station - On Structure	Each	\$15,000,000			1	\$	15,000,000			\$	-			\$	-			\$	-	
Caltrain Passenger Station - In Tunnel or Subway	Each	\$15,000,000				\$	-			\$	-			\$	-			\$	-	
Caltrain Passenger Station - In Trench	Each	\$15,000,000				\$	-			\$	-		1	\$	15,000,000		1	\$	15,000,000	
3 Maintenance Facility	Each	\$	-			\$	-			\$	-			\$	-			\$	-	
4 Parking - Structures	space	\$	-			\$	-			\$	-			\$	-			\$	-	
5 Parking - At Grade	space	\$	-			\$	-			\$	-			\$	-			\$	-	
Rail & Utility Relocation																				
1 Single Track Relocation (Temporary)	Mile	\$	2,000,896			\$	-			\$	-			\$	-			\$	-	
2 Single Track Relocation (Permanent)	Mile	\$	2,000,896			\$	-			\$	-			\$	-			\$	-	
3 Single Track Removal	Mile	\$	130,048			\$	-			\$	-			\$	-			\$	-	
4 Major Utility Relocations - Dense Urban	Mile	\$	1,548,288			\$	-			\$	-			\$	-			\$	-	
5 Major Utility Relocations - Urban	Mile	\$	1,084,416			\$	-			\$	-			\$	-			\$	-	
6 Major Utility Relocations - Dense Suburban	Mile	\$	775,168			\$	-			\$	-			\$	-			\$	-	
7 Major Utility Relocations - Suburban	Mile	\$	464,896			\$	-			\$	-			\$	-			\$	-	
8 Major Utility Relocations - Undeveloped	Mile	\$	30,720			\$	-			\$	-			\$	-			\$	-	
ROW (Not Included)																				
ROW required for each segment																				
1 Dense Urban	Acre	\$	2,786,321			\$	-			\$	-			\$	-			\$	-	
2 Urban	Acre	\$	1,371,510			\$	-			\$	-			\$	-			\$	-	
3 Dense Suburban	Acre	\$	908,134			\$	-			\$	-			\$	-			\$	-	
4 Suburban	Acre	\$	208,418			\$	-			\$	-			\$	-			\$	-	
5 Undeveloped	Acre	\$	3,642			\$	-			\$	-			\$	-			\$	-	
ROW required for Temp. Construction Easement																				
1 Dense Urban	Acre					\$	-			\$	-			\$	-					
2 Urban	Acre					\$	-			\$	-			\$	-					
3 Dense Suburban	Acre					\$	-			\$	-			\$	-					
4 Suburban	Acre					\$	-			\$	-			\$	-					
5 Undeveloped	Acre					\$	-			\$	-			\$	-					
Right-of-Way Required for Stations, Maintenance & Parking Facilities																				
6 Dense Urban	Acre	\$	2,786,321			\$	-			\$	-			\$	-			\$	-	
7 Urban	Acre	\$	1,371,510			\$	-			\$	-			\$	-			\$	-	
8 Dense Suburban	Acre	\$	908,134			\$	-			\$	-			\$	-			\$	-	
9 Suburban	Acre	\$	208,418			\$	-			\$	-			\$	-			\$	-	
10 Undeveloped	Acre	\$	3,642			\$	-			\$	-			\$	-			\$	-	
Environmental Mitigation = 3% Line Costs						\$	2,490,785			\$	544,165			\$	4,067,427			\$	9,859,392	
System Elements																				
1 Signaling (ATC)	Mile	\$	2,070,000			1.04	\$	2,156,250			1.04	\$	2,156,250			1.04	\$	2,156,250		
2 Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			1.04	\$	562,500			1.04	\$	562,500			1.04	\$	562,500		
3 Wayside Protection System	Mile	\$	108,000			1.04	\$	112,500			1.04	\$	112,500			1.04	\$	112,500		
Electrification Items																				
1 Traction Power supply	Mile	\$	1,170,000			1.04	\$	1,218,750			1.04	\$	1,218,750			1.04	\$	1,218,750		
2 Traction Power Distribution	Mile	\$	1,485,000			1.04	\$	1,546,875			1.04	\$	1,546,875			1.04	\$	1,546,875		
Subtotal						\$	91,113,814			\$	24,279,871			\$	145,245,202			\$	344,102,669	
Program Implementation Costs (per screening)						\$	23,234,023			\$	6,191,367			\$	37,037,527			\$	87,746,181	
Program Implementation Costs																				
Contingencies (per screening) (25%)						\$	22,778,454			\$	6,069,968			\$	36,311,301			\$	86,025,667	
Subtotal						\$	137,126,291			\$	36,541,207			\$	218,594,029			\$	517,874,517	
Subtotal (Rounded)						\$	137,000,000			\$	37,000,000			\$	219,000,000			\$	518,000,000	

COST ELEMENTS			UNIT	UNIT PRICE	Elevated Viaduct				At-Grade				Open Trench				Covered Trench					
Subsection 7				Base: 2009 (3rd Quarter)	B				B				B				B					
					Start: 2025 + 00	End: 2125 + 00	1.89 Miles		Start: 2025 + 00	End: 2125 + 00	1.89 Miles		Start: 2025 + 00	End: 2125 + 00	1.89 Miles		Start: 2025 + 00	End: 2125 + 00	1.89 Miles			
Subsection Dedtails						Quant.	Cost			Quant.	Cost			Quant.	Cost			Quant.	Cost			
Double Track At-Grade (Mile)						Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
Double Track Elevated (Mile)						Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Double Track Tunnel (Mile)						Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Double Track Trench (Mile)						Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Four Track Construction/Reconstruction At-Grade (Mile)						Start: 0 + 00		0.00 Miles		Start: 2025 + 00	End: 2125 + 00	1.89 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Four Track Elevated (Mile)						Start: 2025 + 00	End: 2125 + 00	1.89 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Four Track Tunnel (Mile)						Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 2025 + 00	End: 2125 + 00	1.89 Miles		
Four Track Trench (Mile)						Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 2025 + 00	End: 2125 + 00	1.89 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
Double Track Section - Total																						
1	Double Track Section - At Grade	Mile	\$	2,100,224				0.00	\$	-			0.00	\$	-			0.00	\$	-		
2	Double Track Section - On Structure	Mile	\$	4,700,160				0.00	\$	-			0.00	\$	-			0.00	\$	-		
3	Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160				0.00	\$	-			0.00	\$	-			0.00	\$	-		
4	Double Track Section - In Trench	Mile	\$	4,700,160				0.00	\$	-			0.00	\$	-			0.00	\$	-		
Four Track Section - Total																						
	Four-track Section - At Grade	Mile	\$	4,200,448				0.00	\$	-			1.89	\$	7,955,394			0.00	\$	-		
	Four-Track Section - On Structure	Mile	\$	9,400,320				1.89	\$	17,803,636			0	\$	-			0.00	\$	-		
	Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320				0.00	\$	-			0	\$	-			0.00	\$	-		
	Four-Track Section - In Trench	Mile	\$	9,400,320				0.00	\$	-			0	\$	-			1.89	\$	17,803,636		
Single Track - Total																						
5	Single Track Section - At Grade	Mile	\$	1,549,312				0	\$	-			0	\$	-			0	\$	-		
6	Single Track Section - On structure	Mile	\$	2,350,080				0	\$	-			0	\$	-			0	\$	-		
7	Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080				0	\$	-			0	\$	-			0	\$	-		
8	Single Track Section - In Trench	Mile	\$	2,350,080				0	\$	-			0	\$	-			0	\$	-		
9	Freight Double Track - At Grade	Mile	\$	2,839,552				0	\$	-			0	\$	-			0	\$	-		
10	Freight Single Track - At Grade	Mile	\$	1,549,312				0	\$	-			0	\$	-			0	\$	-		
Earthwork Items																						
1	Site Preparation - Undeveloped	Acre	\$	9,216				25.25	\$	232,727			0.00	\$	-			25.25	\$	232,727		
2	Total Cut	CY	\$	6.45				0	\$	-			0	\$	-			1629629.63	\$	10,513,067		
3	Total Fill	CY	\$	6.29				0	\$	-			0	\$	-			0.00	\$	-		
4	Borrow	CY	\$	12.58				0.00	\$	-			0.00	\$	-			0.00	\$	-		
5	Spoil	CY	\$	12.58				0.00	\$	-			0.00	\$	-			1629629.63	\$	20,500,480		
6	Landscape erosion Control	Acre	\$	6,144				0.00	\$	-			0.00	\$	-			25.25	\$	155,152		
7	Security Fencing (Both sides of ROW)	Mile	\$	144,384				0.00	\$	-			1.89	\$	273,455			1.89	\$	273,455		
8	Special Drainage Facilities	5% Earthwork						\$	11,636			\$	13,673					\$	1,583,744	\$	1,306,058	
Structures, Tunnels, Walls																						
1	Standard Structure	Mile	\$	34,972,672				1.89	\$	66,236,121			0	\$	-			0.00	\$	-		
2	High Structure	Mile	\$	40,424,448					\$	-				\$	-				\$	-		
3	Long Span Structure	Mile	\$	61,919,232					\$	-				\$	-				\$	-		
4	Waterway Crossing - Primary	Mile	\$	85,342,208					\$	-				\$	-				\$	-		
5	Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408				0.02	\$	1,743,360			0.03	\$	2,615,040				\$	-		
6	Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264					\$	-				\$	-			0.01	\$	697,344		
7	Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312					\$	-				\$	-				\$	-		
8	Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896					\$	-				\$	-				\$	-		
9	Double Track Drill & Blast	Mile	\$	146,887,680				0.00	\$	-			0	\$	-			0.00	\$	-		
10	Double Track Mined (Soft Soil)	Mile	\$	79,200,000					\$	-				\$	-				\$	-		
	Double Track TBM (<6 Miles)	Mile	\$	106,637,312					\$	-				\$	-				\$	-		
	Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896					\$	-				\$	-				\$	-		
11	Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952					\$	-				\$	-				\$	-		
12	Crossovers	ea	\$	442,368					\$	-				\$	-				\$	-		
13	Cut & Cover Double Track Tunnel	Mile	\$	131,246,080				0.00	\$	-			0	\$	-			0.00	\$	-		
14	Trench Short	Mile	\$	78,843,904				0.00	\$	-			0	\$	-			1.89	\$	149,325,576		
15	Trench Long	Mile	\$	57,524,224					\$	-				\$	-				\$	-		
16	Mechanical & Electrical for Tunnels	Mile	\$	11,848,704				0.00	\$	-			0	\$	-			0.00	\$	-		
17	Retaining Walls	Mile	\$	8,613,888				0.00	\$	-			0	\$	-			1.89	\$	16,314,182		
18	Containment Walls	Mile	\$	5,907,456				0.00	\$	-			0	\$	-			1.89	\$	11,188,364		
19	Single Track Cut and Cover Subway	Mile	\$	131,246,080					\$	-				\$	-				\$	-		
	Four Track Drill & Blast	Mile	\$	293,775,360					\$	-				\$	-				\$	-		
	Four Track Mined (Soft Soil)	Mile	\$	158,400,000					\$	-				\$	-				\$	-		
	Four Track TBM (<6 Miles)	Mile	\$	213,274,624					\$	-				\$	-				\$	-		
	Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792					\$	-				\$	-				\$	-		
	Four Track Cut & Cover Tunnel	Mile	\$	262,492,160				0.00	\$	-			0.00	\$	-			1.89	\$	497,144,242		
Grade Separations																						
1	Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352					\$	-				\$	-				\$	-		
	Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528				1	\$	19,926,528			2	\$	39,853,056				\$	-		
2	Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680				1	\$	2,759,680				\$	-				\$	-		
3	Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568					\$	-				\$	-				\$	-		
4	Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520				0	\$	-			0	\$	-				\$	-		
5	Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216					\$	-				\$	-				\$	-		
	Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816					\$	-				\$	-				\$	-		
6	Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328				0	\$	-			0	\$	-				\$	-		
7	Street Bridging HSR Trench	ea	\$	1,398,784					\$	-				2	\$	2,797,568			0	\$	-	
8	Minor Crossing Closures	ea	\$	87,040				1	\$	87,040			1	\$	87,040			1	\$	87,040		-
Building Items																						

COST ELEMENTS			UNIT	UNIT PRICE	Elevated Viaduct			At-Grade				Open Trench				Covered Trench					
Subsection 7			Base: 2009 (3rd Quarter)	B			B				B				B						
				Start: 2025 + 00	End: 2125 + 00	1.89 Miles	Start: 2025 + 00	End: 2125 + 00	1.89 Miles	Start: 2025 + 00	End: 2125 + 00	1.89 Miles	Start: 2025 + 00	End: 2125 + 00	1.89 Miles						
Subsection Dedtails						Quant.	Cost			Quant.	Cost			Quant.	Cost			Quant.	Cost		
Double Track At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles						
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles						
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles						
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00		0.00 Miles		Start: 2025 + 00	End: 2125 + 00	1.89 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		
Four Track Elevated (Mile)					Start: 2025 + 00	End: 2125 + 00	1.89 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles						
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 2025 + 00	End: 2125 + 00	1.89 Miles		
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 2025 + 00	End: 2125 + 00	1.89 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		
1	Intermediate Passenger Stations	Each	\$	-			\$	-			\$	-	1	\$	-			1	\$	-	
2	Terminal Passenger Stations	Each	\$	-			\$	-			\$	-		\$	-				\$	-	
	Caltrain Passenger Station - At-Grade	Each	\$	15,000,000			1	\$	15,000,000			1	\$	15,000,000					\$	-	
	Caltrain Passenger Station - On Structure	Each	\$	15,000,000				\$	-			\$	-		\$	-			\$	-	
	Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000				\$	-			\$	-	0	\$	-			\$	-	
	Caltrain Passenger Station - In Trench	Each	\$	15,000,000				\$	-			1	\$	15,000,000			1	\$	15,000,000		
3	Maintenance Facility	Each	\$	-				\$	-			\$	-		\$	-			\$	-	
4	Parking - Structures	space	\$	-				\$	-			\$	-		\$	-			\$	-	
5	Parking - At Grade	space	\$	-				\$	-			\$	-		\$	-			\$	-	
Rail & Utility Relocation																					
1	Single Track Relocation (Temporary)	Mile	\$	2,000,896				\$	-			\$	-		\$	-			\$	-	
2	Single Track Relocation (Permanent)	Mile	\$	2,000,896				\$	-			\$	-		\$	-			\$	-	
3	Single Track Removal	Mile	\$	130,048				\$	-			\$	-		\$	-			\$	-	
4	Major Utility Relocations - Dense Urban	Mile	\$	1,548,288				\$	-			\$	-		\$	-			\$	-	
5	Major Utility Relocations - Urban	Mile	\$	1,084,416				\$	-			\$	-		\$	-			\$	-	
6	Major Utility Relocations - Dense Suburban	Mile	\$	775,168				\$	-			\$	-		\$	-			\$	-	
7	Major Utility Relocations - Suburban	Mile	\$	464,896				\$	-			\$	-		\$	-			\$	-	
8	Major Utility Relocations - Undeveloped	Mile	\$	30,720				\$	-			\$	-		\$	-			\$	-	
ROW (Not Included)																					
ROW required for each segment																					
1	Dense Urban	Acre	\$	2,786,321				\$	-			\$	-		\$	-			\$	-	
2	Urban	Acre	\$	1,371,510				\$	-			\$	-		\$	-			\$	-	
3	Dense Suburban	Acre	\$	908,134				\$	-			\$	-		\$	-			\$	-	
4	Suburban	Acre	\$	208,418				\$	-			\$	-		\$	-			\$	-	
5	Undeveloped	Acre	\$	3,642				\$	-			\$	-		\$	-			\$	-	
ROW required for Temp. Construction Easement																					
1	Dense Urban	Acre						\$	-												
2	Urban	Acre						\$	-												
3	Dense Suburban	Acre						\$	-												
4	Suburban	Acre						\$	-												
5	Undeveloped	Acre						\$	-												
Right-of-Way Required for Stations, Maintenance & Parking Facilities																					
6	Dense Urban	Acre	\$	2,786,321				\$	-			\$	-		\$	-			\$	-	
7	Urban	Acre	\$	1,371,510				\$	-			\$	-		\$	-			\$	-	
8	Dense Suburban	Acre	\$	908,134				\$	-			\$	-		\$	-			\$	-	
9	Suburban	Acre	\$	208,418				\$	-			\$	-		\$	-			\$	-	
10	Undeveloped	Acre	\$	3,642				\$	-			\$	-		\$	-			\$	-	
Environmental Mitigation = 3% Line Costs								\$	3,714,022			\$	1,973,930			\$	7,373,250			\$	17,415,395
System Elements																					
1	Signaling (ATC)	Mile	\$	2,070,000			1.89	\$	3,920,455			1.89	\$	3,920,455			1.89	\$	3,920,455		
2	Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			1.89	\$	1,022,727			1.89	\$	1,022,727			1.89	\$	1,022,727		
3	Wayside Protection System	Mile	\$	108,000			1.89	\$	204,545			1.89	\$	204,545			1.89	\$	204,545		
Electrification Items																					
1	Traction Power supply	Mile	\$	1,170,000			1.89	\$	2,215,909			1.89	\$	2,215,909			1.89	\$	2,215,909		
2	Traction Power Distribution	Mile	\$	1,485,000			1.89	\$	2,812,500			1.89	\$	2,812,500			1.89	\$	2,812,500		
Subtotal							\$	137,690,887			\$	77,947,723			\$	263,324,376			\$	608,104,693	
Program Implementation Costs (per screening)							\$	35,111,176			\$	19,876,669			\$	67,147,716			\$	155,066,697	
Program Implementation Costs																					
Contingencies (per screening) (25%)							\$	34,422,722			\$	19,486,931			\$	65,831,094			\$	152,026,173	
Subtotal							\$	207,224,786			\$	117,311,324			\$	396,303,185			\$	915,197,563	
Subtotal (Rounded)							\$	207,000,000			\$	117,000,000			\$	396,000,000			\$	915,000,000	

COST ELEMENTS			UNIT	UNIT PRICE	At-Grade				Open Trench				Covered Trench			
Subsection 7			Base: 2009 (3rd Quarter)	C				C				C				
				Start: 2125 + 00	End: 2184 + 00	1.12 Miles		Start: 2125 + 00	End: 2184 + 00	1.12 Miles		Start: 2125 + 00	End: 2184 + 00	1.12 Miles		
Subsection Dedtails					Quant.	Cost			Quant.	Cost			Quant.	Cost		
Double Track At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 2125 + 00	End: 2184 + 00	1.12 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Elevated (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 2125 + 00	End: 2184 + 00	1.12 Miles	
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 2125 + 00	End: 2184 + 00	1.12 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Section - Total																
1	Double Track Section - At Grade	Mile	\$	2,100,224			0.00 \$	-			0.00 \$	-			0.00 \$	-
2	Double Track Section - On Structure	Mile	\$	4,700,160			0.00 \$	-			0.00 \$	-			0.00 \$	-
3	Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160			0.00 \$	-			0.00 \$	-			0.00 \$	-
4	Double Track Section - In Trench	Mile	\$	4,700,160			0.00 \$	-			0.00 \$	-			0.00 \$	-
Four Track Section - Total																
	Four-track Section - At Grade	Mile	\$	4,200,448			1.12 \$	4,693,682			0.00 \$	-			0.00 \$	-
	Four-Track Section - On Structure	Mile	\$	9,400,320			0.00 \$	-			0.00 \$	-			0.00 \$	-
	Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320			0 \$	-			0.00 \$	-			1.12 \$	10,504,145
	Four-Track Section - In Trench	Mile	\$	9,400,320			0 \$	-			1.12 \$	10,504,145			0.00 \$	-
Single Track - Total																
5	Single Track Section - At Grade	Mile	\$	1,549,312			0 \$	-			0 \$	-			0 \$	-
6	Single Track Section - On structure	Mile	\$	2,350,080			0 \$	-			0 \$	-			0 \$	-
7	Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080			0 \$	-			0 \$	-			0 \$	-
8	Single Track Section - In Trench	Mile	\$	2,350,080			0 \$	-			0 \$	-			0 \$	-
9	Freight Double Track - At Grade	Mile	\$	2,839,552			0 \$	-			0 \$	-			0 \$	-
10	Freight Single Track - At Grade	Mile	\$	1,549,312			0 \$	-			0 \$	-			0 \$	-
Earthwork Items																
1	Site Preparation - Undeveloped	Acre	\$	9,216			0.00 \$	-			14.90 \$	137,309			14.90 \$	137,309
2	Total Cut	CY	\$	6.45			0 \$	-			961481.48 \$	6,202,709			961481.48 \$	6,202,709
3	Total Fill	CY	\$	6.29			0 \$	-			0.00 \$	-			480740.74 \$	3,023,821
4	Borrow	CY	\$	12.58			0.00 \$	-			0.00 \$	-			0.00 \$	-
5	Spoil	CY	\$	12.58			0.00 \$	-			961481.48 \$	12,095,283			480740.74 \$	6,047,642
6	Landscape erosion Control	Acre	\$	6,144			0.00 \$	-			14.90 \$	91,539			0.00 \$	-
7	Security Fencing (Both sides of ROW)	Mile	\$	144,384			1.12 \$	161,338			1.12 \$	161,338			0.00 \$	-
8	Special Drainage Facilities	5% Earthwork					\$	8,067			\$	934,409			\$	770,574
Structures, Tunnels, Walls																
1	Standard Structure	Mile	\$	34,972,672			0.00 \$	-			0.00 \$	-			0 \$	-
2	High Structure	Mile	\$	40,424,448			\$	-			\$	-			\$	-
3	Long Span Structure	Mile	\$	61,919,232			\$	-			\$	-			\$	-
4	Waterway Crossing - Primary	Mile	\$	85,342,208			\$	-			\$	-			\$	-
5	Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408			\$	-			\$	-			0.00 \$	-
6	Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264			\$	-			\$	-			\$	-
7	Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312			\$	-			\$	-			\$	-
8	Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896			\$	-			\$	-			\$	-
9	Double Track Drill & Blast	Mile	\$	146,887,680			0 \$	-			0.00 \$	-			0 \$	-
10	Double Track Mined (Soft Soil)	Mile	\$	79,200,000			\$	-			\$	-			\$	-
	Double Track TBM (<6 Miles)	Mile	\$	106,637,312			\$	-			\$	-			\$	-
	Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896			\$	-			\$	-			\$	-
11	Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952			\$	-			\$	-			\$	-
12	Crossovers	ea	\$	442,368			\$	-			\$	-			\$	-
13	Cut & Cover Double Track Tunnel	Mile	\$	131,246,080			0 \$	-			0.00 \$	-			0 \$	-
14	Trench Short	Mile	\$	78,843,904			0 \$	-			1.12 \$	88,102,090			0.00 \$	-
15	Trench Long	Mile	\$	57,524,224			\$	-			\$	-			\$	-
16	Mechanical & Electrical for Tunnels	Mile	\$	11,848,704			0 \$	-			0.00 \$	-			1.12 \$	13,240,029
17	Retaining Walls	Mile	\$	8,613,888			0 \$	-			1.12 \$	9,625,367			0.00 \$	-
18	Containment Walls	Mile	\$	5,907,456			0 \$	-			1.12 \$	6,601,135			0.00 \$	-
19	Single Track Cut and Cover Subway	Mile	\$	131,246,080			\$	-			\$	-			\$	-
	Four Track Drill & Blast	Mile	\$	293,775,360			\$	-			\$	-			\$	-
	Four Track Mined (Soft Soil)	Mile	\$	158,400,000			\$	-			\$	-			\$	-
	Four Track TBM (<6 Miles)	Mile	\$	213,274,624			\$	-			\$	-			\$	-
	Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792			\$	-			\$	-			\$	-
	Four Track Cut & Cover Tunnel	Mile	\$	262,492,160			0.00 \$	-			0.00 \$	-			1.12 \$	293,315,103
Grade Separations																
1	Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352			\$	-			\$	-			\$	-
	Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528			\$	-			\$	-			\$	-
2	Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680			\$	-			\$	-			\$	-
3	Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568			\$	-			\$	-			\$	-
4	Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520			0 \$	-			\$	-			\$	-
5	Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216			\$	-			\$	-			\$	-
	Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816			\$	-			\$	-			\$	-
6	Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328			\$	-			\$	-			\$	-
7	Street Bridging HSR Trench	ea	\$	1,398,784			\$	-			0 \$	-			0 \$	-
8	Minor Crossing Closures	ea	\$	87,040			\$	-			0 \$	-			0 \$	-
Building Items																

COST ELEMENTS			UNIT	UNIT PRICE	At-Grade			Open Trench				Covered Trench							
Subsection 7				Base: 2009 (3rd Quarter)	C			C				C							
					Start: 2125 + 00	End: 2184 + 00	1.12 Miles	Start: 2125 + 00	End: 2184 + 00	1.12 Miles	Start: 2125 + 00	End: 2184 + 00	1.12 Miles						
Subsection Dedtails						Quant.	Cost			Quant.	Cost			Quant.	Cost				
Double Track At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles				
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles				
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles				
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 2125 + 00	End: 2184 + 00	1.12 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles				
Four Track Elevated (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles				
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 2125 + 00	End: 2184 + 00	1.12 Miles				
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 2125 + 00	End: 2184 + 00	1.12 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
1	Intermediate Passenger Stations	Each	\$	-				\$	-		\$	-		\$	-				
2	Terminal Passenger Stations	Each	\$	-				\$	-		\$	-		\$	-				
	Caltrain Passenger Station - At-Grade	Each	\$	15,000,000			0	\$	-		\$	-		\$	-				
	Caltrain Passenger Station - On Structure	Each	\$	\$15,000,000				\$	-		\$	-		\$	-				
	Caltrain Passenger Station - In Tunnel or Subway	Each	\$	\$15,000,000				\$	-		0	\$	-	0	\$	-			
	Caltrain Passenger Station - In Trench	Each	\$	\$15,000,000				\$	-		0	\$	-	\$	-				
3	Maintenance Facility	Each	\$	-				\$	-		\$	-		\$	-				
4	Parking - Structures	space	\$	-				\$	-		\$	-		\$	-				
5	Parking - At Grade	space	\$	-				\$	-		\$	-		\$	-				
Rail & Utility Relocation																			
1	Single Track Relocation (Temporary)	Mile	\$	2,000,896				\$	-		\$	-		\$	-				
2	Single Track Relocation (Permanent)	Mile	\$	2,000,896				\$	-		\$	-		\$	-				
3	Single Track Removal	Mile	\$	130,048				\$	-		\$	-		\$	-				
4	Major Utility Relocations - Dense Urban	Mile	\$	1,548,288				\$	-		\$	-		\$	-				
5	Major Utility Relocations - Urban	Mile	\$	1,084,416				\$	-		\$	-		\$	-				
6	Major Utility Relocations - Dense Suburban	Mile	\$	775,168				\$	-		\$	-		\$	-				
7	Major Utility Relocations - Suburban	Mile	\$	464,896				\$	-		\$	-		\$	-				
8	Major Utility Relocations - Undeveloped	Mile	\$	30,720				\$	-		\$	-		\$	-				
ROW (Not Included)																			
ROW required for each segment																			
1	Dense Urban	Acre	\$	2,786,321				\$	-		\$	-		\$	-				
2	Urban	Acre	\$	1,371,510				\$	-		\$	-		\$	-				
3	Dense Suburban	Acre	\$	908,134				\$	-		\$	-		\$	-				
4	Suburban	Acre	\$	208,418				\$	-		\$	-		\$	-				
5	Undeveloped	Acre	\$	3,642				\$	-		\$	-		\$	-				
ROW required for Temp. Construction Easement																			
1	Dense Urban	Acre						\$	-										
2	Urban	Acre						\$	-										
3	Dense Suburban	Acre						\$	-										
4	Suburban	Acre						\$	-										
5	Undeveloped	Acre						\$	-										
Right-of-Way Required for Stations, Maintenance & Parking Facilities																			
6	Dense Urban	Acre	\$	2,786,321				\$	-		\$	-		\$	-				
7	Urban	Acre	\$	1,371,510				\$	-		\$	-		\$	-				
8	Dense Suburban	Acre	\$	908,134				\$	-		\$	-		\$	-				
9	Suburban	Acre	\$	208,418				\$	-		\$	-		\$	-				
10	Undeveloped	Acre	\$	3,642				\$	-		\$	-		\$	-				
Environmental Mitigation = 3% Line Costs								\$	145,893				\$	4,033,660		\$	9,997,240		
System Elements																			
1	Signaling (ATC)	Mile	\$	2,070,000			1.12	\$	2,313,068			1.12	\$	2,313,068		\$	2,313,068		
2	Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			1.12	\$	603,409			1.12	\$	603,409		\$	603,409		
3	Wayside Protection System	Mile	\$	108,000			1.12	\$	120,682			1.12	\$	120,682		\$	120,682		
Electrification Items																			
1	Traction Power supply	Mile	\$	1,170,000			1.12	\$	1,307,386			1.12	\$	1,307,386		\$	1,307,386		
2	Traction Power Distribution	Mile	\$	1,485,000			1.12	\$	1,659,375			1.12	\$	1,659,375		\$	1,659,375		
Subtotal								\$	11,012,901				\$	144,492,905		\$	349,242,493		
Program Implementation Costs (per screening)								\$	2,808,290				\$	36,845,691		\$	89,056,836		
Program Implementation Costs																			
Contingencies (per screening) (25%)								\$	2,753,225				\$	36,123,226		\$	87,310,623		
Subtotal								\$	16,574,415				\$	217,461,823		\$	525,609,952		
Subtotal (Rounded)								\$ 17,000,000				\$ 217,000,000				\$ 526,000,000			

COST ELEMENTS			UNIT	UNIT PRICE	Elevated Viaduct				At-Grade				Open Trench				Covered Trench			
Subsection 7			Base: 2009		D				D				D				D			
					Start: 2184 + 00	End: 2270 + 00	1.63 Miles		Start: 2184 + 00	End: 2270 + 00	1.63 Miles		Start: 2184 + 00	End: 2270 + 00	1.63 Miles		Start: 2184 + 00	End: 2270 + 00	1.63 Miles	
							Quant.	Cost			Quant.	Cost			Quant.	Cost			Quant.	Cost
Double Track At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 2245 + 00	End: 2270 + 00	0.47 Miles		Start: 2184 + 00	End: 2270 + 00	1.63 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Elevated (Mile)					Start: 2184 + 00	End: 2245 + 00	1.16 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 2184 + 00	End: 2270 + 00	1.63 Miles	
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 2184 + 00	End: 2270 + 00	1.63 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Section - Total																				
1	Double Track Section - At Grade	Mile	\$	2,100,224			0.00	\$	-			0.00	\$	-			0	\$	-	
2	Double Track Section - On Structure	Mile	\$	4,700,160			0.00	\$	-			0.00	\$	-			0	\$	-	
3	Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160			0.00	\$	-			0.00	\$	-			0	\$	-	
4	Double Track Section - In Trench	Mile	\$	4,700,160			0.00	\$	-			0.00	\$	-			0	\$	-	
Four Track Section - Total																				
	Four-track Section - At Grade	Mile	\$	4,200,448			0.47	\$	1,988,848			1.63	\$	6,841,639			0.00	\$	-	
	Four-Track Section - On Structure	Mile	\$	9,400,320			1.16	\$	10,860,218			0	\$	-			0.00	\$	-	
	Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320			0.00	\$	-			0	\$	-			0.00	\$	-	
	Four-Track Section - In Trench	Mile	\$	9,400,320			0.00	\$	-			0	\$	-			1.63	\$	15,311,127	
Single Track - Total																				
5	Single Track Section - At Grade	Mile	\$	1,549,312			0	\$	-			0	\$	-			0	\$	-	
6	Single Track Section - On structure	Mile	\$	2,350,080			0	\$	-			0	\$	-			0	\$	-	
7	Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080			0	\$	-			0	\$	-			0	\$	-	
8	Single Track Section - In Trench	Mile	\$	2,350,080			0	\$	-			0	\$	-			0	\$	-	
9	Freight Double Track - At Grade	Mile	\$	2,839,552			0	\$	-			0	\$	-			0	\$	-	
10	Freight Single Track - At Grade	Mile	\$	1,549,312			0	\$	-			0	\$	-			0	\$	-	
Earthwork Items																				
1	Site Preparation - Undeveloped	Acre	\$	9,216			15.40	\$	141,964			0.00	\$	-			21.72	\$	200,145	
2	Total Cut	CY	\$	6.45			0	\$	-			0.00	\$	-			700740.74	\$	4,520,619	
3	Total Fill	CY	\$	6.29			0	\$	-			0.00	\$	-			0.00	\$	-	
4	Borrow	CY	\$	12.58			0.00	\$	-			0.00	\$	-			0.00	\$	-	
5	Spoil	CY	\$	12.58			0.00	\$	-			0.00	\$	-			700740.74	\$	8,815,206	
6	Landscape erosion Control	Acre	\$	6,144			0.00	\$	-			0.00	\$	-			21.72	\$	133,430	
7	Security Fencing (Both sides of ROW)	Mile	\$	144,384			0.47	\$	68,364			1.63	\$	235,171			1.63	\$	235,171	
8	Special Drainage Facilities	5% Earthwork						\$	10,516				\$	11,759				\$	695,229	
Structures, Tunnels, Walls																				
1	Standard Structure	Mile	\$	34,972,672			1.16	\$	40,404,034			0.00	\$	-			0.00	\$	-	
2	High Structure	Mile	\$	40,424,448				\$	-				\$	-				\$	-	
3	Long Span Structure	Mile	\$	61,919,232				\$	-				\$	-				\$	-	
4	Waterway Crossing - Primary	Mile	\$	85,342,208				\$	-				\$	-				\$	-	
5	Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408			0.02	\$	1,743,360			0.01	\$	871,680				\$	-	
6	Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264				\$	-				\$	-				\$	-	
7	Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312				\$	-				\$	-				\$	-	
8	Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896				\$	-				\$	-				\$	-	
9	Double Track Drill & Blast	Mile	\$	146,887,680			0.00	\$	-			0	\$	-			0.00	\$	-	
10	Double Track Mined (Soft Soil)	Mile	\$	174,231,030				\$	-				\$	-				\$	-	
	Double Track TBM (<6 Miles)	Mile	\$	106,637,312				\$	-				\$	-				\$	-	
	Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896				\$	-				\$	-				\$	-	
11	Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952				\$	-				\$	-				\$	-	
12	Crossovers	ea	\$	442,368				\$	-				\$	-				\$	-	
13	Cut & Cover Double Track Tunnel	Mile	\$	131,246,080			0.00	\$	-			0	\$	-			0.00	\$	-	
14	Trench Short	Mile	\$	78,843,904			0.00	\$	-			0	\$	-			1.63	\$	128,419,995	
15	Trench Long	Mile	\$	57,524,224				\$	-				\$	-				\$	-	
16	Mechanical & Electrical for Tunnels	Mile	\$	11,848,704			0.00	\$	-			0	\$	-			0.00	\$	-	
17	Retaining Walls	Mile	\$	8,613,888			0.00	\$	-			0	\$	-			1.63	\$	14,030,196	
18	Containment Walls	Mile	\$	5,907,456			0.00	\$	-			0	\$	-			1.63	\$	9,621,993	
19	Single Track Cut and Cover Subway	Mile	\$	131,246,080				\$	-				\$	-				\$	-	
	Four Track Drill & Blast	Mile	\$	293,775,360				\$	-				\$	-				\$	-	
	Four Track Mined (Soft Soil)	Mile	\$	348,462,059				\$	-				\$	-				\$	-	
	Four Track TBM (<6 Miles)	Mile	\$	213,274,624				\$	-				\$	-				\$	-	
	Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792				\$	-				\$	-				\$	-	
	Four Track Cut & Cover Tunnel	Mile	\$	262,492,160			0.00	\$	-			0.00	\$	-			0.00	\$	-	
Grade Separations																				
1	Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352				\$	-				\$	-				\$	-	
	Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528			0	\$	-			2	\$	39,853,056				\$	-	
2	Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680				\$	-				\$	-				\$	-	
3	Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568				\$	-				\$	-				\$	-	
4	Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520			0	\$	-			0	\$	-				\$	-	
5	Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216				\$	-				\$	-				\$	-	
	Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520				\$	-				\$	-				\$	-	
6	Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328				\$	-				\$	-				\$	-	
7	Street Bridging HSR Trench	ea	\$	1,398,784				\$	-				\$	-			2	\$	2,797,568	
8	Minor Crossing Closures	ea	\$	87,040				\$	-				\$	-				\$	-	
Building Items																				

COST ELEMENTS			UNIT	UNIT PRICE	Elevated Viaduct			At-Grade				Open Trench				Covered Trench					
Subsection 7			Base: 2009	D			D				D				D						
				Start: 2184 + 00	End: 2270 + 00	1.63 Miles		Start: 2184 + 00	End: 2270 + 00	1.63 Miles		Start: 2184 + 00	End: 2270 + 00	1.63 Miles		Start: 2184 + 00	End: 2270 + 00	1.63 Miles			
Subsection Dedtails						Quant.	Cost			Quant.	Cost			Quant.	Cost			Quant.	Cost		
Double Track At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Double Track Elevated (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Double Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 2245 + 00	End: 2270 + 00	0.47 Miles		Start: 2184 + 00	End: 2270 + 00	1.63 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles			
Four Track Elevated (Mile)				Start: 2184 + 00	End: 2245 + 00	1.16 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
Four Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 2184 + 00	End: 2270 + 00	1.63 Miles			
Four Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 2184 + 00	End: 2270 + 00	1.63 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles			
1 Intermediate Passenger Stations	Each	\$	-				\$	-			\$	-			\$	-			\$	-	
2 Terminal Passenger Stations	Each	\$	-				\$	-			\$	-			\$	-			\$	-	
Caltrain Passenger Station - At-Grade	Each	\$	15,000,000				\$	-		1	15,000,000				\$	-			\$	-	
Caltrain Passenger Station - On Structure	Each	\$	15,000,000			0	\$	-			\$	-			\$	-			\$	-	
Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000				\$	-			\$	-			\$	-			\$	-	
Caltrain Passenger Station - In Trench	Each	\$	15,000,000				\$	-			\$	-		1	\$	15,000,000		1	\$	15,000,000	
3 Maintenance Facility	Each	\$	-				\$	-			\$	-			\$	-			\$	-	
4 Parking - Structures	space	\$	-				\$	-			\$	-			\$	-			\$	-	
5 Parking - At Grade	space	\$	-				\$	-			\$	-			\$	-			\$	-	
Rail & Utility Relocation																					
1 Single Track Relocation (Temporary)	Mile	\$	2,000,896				\$	-			\$	-			\$	-			\$	-	
2 Single Track Relocation (Permanent)	Mile	\$	2,000,896				\$	-			\$	-			\$	-			\$	-	
3 Single Track Removal	Mile	\$	130,048				\$	-			\$	-			\$	-			\$	-	
4 Major Utility Relocations - Dense Urban	Mile	\$	1,548,288				\$	-			\$	-			\$	-			\$	-	
5 Major Utility Relocations - Urban	Mile	\$	1,084,416				\$	-			\$	-			\$	-			\$	-	
6 Major Utility Relocations - Dense Suburban	Mile	\$	775,168				\$	-			\$	-			\$	-			\$	-	
7 Major Utility Relocations - Suburban	Mile	\$	464,896				\$	-			\$	-			\$	-			\$	-	
8 Major Utility Relocations - Undeveloped	Mile	\$	30,720				\$	-			\$	-			\$	-			\$	-	
ROW (Not Included)																					
ROW required for each segment																					
1 Dense Urban	Acre	\$	2,786,321				\$	-			\$	-			\$	-			\$	-	
2 Urban	Acre	\$	1,371,510				\$	-			\$	-			\$	-			\$	-	
3 Dense Suburban	Acre	\$	908,134				\$	-			\$	-			\$	-			\$	-	
4 Suburban	Acre	\$	208,418				\$	-			\$	-			\$	-			\$	-	
5 Undeveloped	Acre	\$	3,642				\$	-			\$	-			\$	-			\$	-	
ROW required for Temp. Construction Easement							\$	-			\$	-			\$	-			\$	-	
1 Dense Urban	Acre						\$	-			\$	-			\$	-			\$	-	
2 Urban	Acre						\$	-			\$	-			\$	-			\$	-	
3 Dense Suburban	Acre						\$	-			\$	-			\$	-			\$	-	
4 Suburban	Acre						\$	-			\$	-			\$	-			\$	-	
5 Undeveloped	Acre						\$	-			\$	-			\$	-			\$	-	
Right-of-Way Required for Stations, Maintenance & Parking Facilities							\$	-			\$	-			\$	-			\$	-	
6 Dense Urban	Acre	\$	2,786,321				\$	-			\$	-			\$	-			\$	-	
7 Urban	Acre	\$	1,371,510				\$	-			\$	-			\$	-			\$	-	
8 Dense Suburban	Acre	\$	908,134				\$	-			\$	-			\$	-			\$	-	
9 Suburban	Acre	\$	208,418				\$	-			\$	-			\$	-			\$	-	
10 Undeveloped	Acre	\$	3,642				\$	-			\$	-			\$	-			\$	-	
Environmental Mitigation = 3% Line Costs							\$	1,656,519			\$	1,884,399			\$	5,993,420			\$	15,162,868	
System Elements																					
1 Signaling (ATC)	Mile	\$	2,070,000			1.63	\$	3,371,591			1.63	\$	3,371,591			1.63	\$	3,371,591			
2 Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			1.63	\$	879,545			1.63	\$	879,545			1.63	\$	879,545			
3 Wayside Protection System	Mile	\$	108,000			1.63	\$	175,909			1.63	\$	175,909			1.63	\$	175,909			
Electrification Items																					
1 Traction Power supply	Mile	\$	1,170,000			1.63	\$	1,905,682			1.63	\$	1,905,682			1.63	\$	1,905,682			
2 Traction Power Distribution	Mile	\$	1,485,000			1.63	\$	2,418,750			1.63	\$	2,418,750			1.63	\$	2,418,750			
Subtotal							\$	65,625,301			\$	73,449,181			\$	214,525,578			\$	529,343,265	
Program Implementation Costs (per screening)							\$	16,734,452			\$	18,729,541			\$	54,704,022			\$	134,982,532	
Program Implementation Costs																					
Contingencies (per screening) (25%)							\$	16,406,325			\$	18,362,295			\$	53,631,394			\$	132,335,816	
Subtotal							\$	98,766,077			\$	110,541,017			\$	322,860,994			\$	796,661,613	
Subtotal (Rounded)							\$	99,000,000			#####			\$	323,000,000			\$	797,000,000		

Subsection 8	8A (6.4 miles)	8B (0.6 miles)			
	At Grade	Aerial Viaduct (HST Only)	At Grade (HST Only)	Covered Trench/Tunnel (HST Only)	Deep Tunnel (HST Only)
Capital Cost (\$2009 in Millions) does not include ROW	\$125	\$40 (2 tracks)	\$7 (2 tracks)	\$150 (2 tracks)	\$113 (2 tracks)
Acquisition Cost of Permanent ROW	Highest	Medium	Highest	Lowest	Lowest
Notes:	1. Portions of existing alignment are 4-track. 2. Caltrain Lawrence station.				

COST ELEMENTS			UNIT	UNIT PRICE	At-Grade			
Subsection 8				Base: 2009 (3rd Quarter)	A			
					Start: 2270 + 00	End: 2610 + 00	6.44 Miles	
Subsection Dedtails							Quant.	Cost
Double Track At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles	
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles	
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 2270 + 00	End: 2610 + 00	6.44 Miles	
Four Track Elevated (Mile)					Start: 0 + 00		0.00 Miles	
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles	
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles	
Double Track Section - Total								
1 Double Track Section - At Grade	Mile	\$	2,100,224				0.00	\$ -
2 Double Track Section - On Structure	Mile	\$	4,700,160				0.00	\$ -
3 Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160				0.00	\$ -
4 Double Track Section - In Trench	Mile	\$	4,700,160				0.00	\$ -
Four Track Section - Total								
Four-track Section - At Grade	Mile	\$	4,200,448				6.44	\$ 27,048,339
Four-Track Section - On Structure	Mile	\$	9,400,320				0.00	\$ -
Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320				0.00	\$ -
Four-Track Section - In Trench	Mile	\$	9,400,320				0.00	\$ -
Single Track - Total								
5 Single Track Section - At Grade	Mile	\$	1,549,312				0	\$ -
6 Single Track Section - On structure	Mile	\$	2,350,080				0	\$ -
7 Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080				0	\$ -
8 Single Track Section - In Trench	Mile	\$	2,350,080				0	\$ -
9 Freight Double Track - At Grade	Mile	\$	2,839,552				0	\$ -
10 Freight Single Track - At Grade	Mile	\$	1,549,312				0	\$ -
Earthwork Items								
1 Site Preparation - Undeveloped	Acre	\$	9,216				85.86	\$ 791,273
2 Total Cut	CY	\$	6.45				0	\$ -
3 Total Fill	CY	\$	6.29				0	\$ -
4 Borrow	CY	\$	12.58				0	\$ -
5 Spoil	CY	\$	12.58				0	\$ -
6 Landscape erosion Control	Acre	\$	6,144				85.86	\$ 527,515
7 Security Fencing (Both sides of ROW)	Mile	\$	144,384				0.00	\$ -
8 Special Drainage Facilities	5% Earthwork							\$ 65,939
Structures, Tunnels, Walls								
1 Standard Structure	Mile	\$	34,972,672				0	\$ -
2 High Structure	Mile	\$	40,424,448					\$ -
3 Long Span Structure	Mile	\$	61,919,232					\$ -
4 Waterway Crossing - Primary	Mile	\$	85,342,208					\$ -
5 Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408				0.04	\$ 3,486,720
6 Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264					\$ -
7 Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312					\$ -
8 Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896					\$ -
9 Double Track Drill & Blast	Mile	\$	146,887,680				0	\$ -
10 Double Track Mined (Soft Soil)	Mile	\$	79,200,000					\$ -
Double Track TBM (<6 Miles)	Mile	\$	106,637,312					
Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896					
11 Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952					\$ -
12 Crossovers	ea	\$	442,368					\$ -
13 Cut & Cover Double Track Tunnel	Mile	\$	131,246,080				0	\$ -
14 Trench Short	Mile	\$	78,843,904				0	\$ -
15 Trench Long	Mile	\$	57,524,224					\$ -
16 Mechanical & Electrical for Tunnels	Mile	\$	11,848,704					\$ -
17 Retaining Walls	Mile	\$	8,613,888				0	\$ -
18 Containment Walls	Mile	\$	5,907,456				0	\$ -
19 Single Track Cut and Cover Subway	Mile	\$	131,246,080					\$ -
Four Track Drill & Blast	Mile	\$	293,775,360					\$ -
Four Track Mined (Soft Soil)	Mile	\$	158,400,000					\$ -
Four Track TBM (<6 Miles)	Mile	\$	213,274,624					
Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792					
Four Track Cut & Cover Tunnel	Mile	\$	262,492,160					\$ -
Grade Separations								
1 Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352					\$ -
Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528					\$ -
2 Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680				0	\$ -
3 Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568					\$ -
4 Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520					\$ -
5 Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216					\$ -
Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816				0	\$ -
6 Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328					\$ -
7 Street Bridging HSR Trench	ea	\$	1,398,784					\$ -
8 Minor Crossing Closures	ea	\$	87,040					\$ -
Building Items								

COST ELEMENTS			UNIT	UNIT PRICE	At-Grade			
Subsection 8				Base: 2009 (3rd Quarter)	A			
					Start: 2270 + 00	End: 2610 + 00	6.44 Miles	
Subsection Dedtails						Quant.	Cost	
Double Track At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles	
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles	
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 2270 + 00	End: 2610 + 00	6.44 Miles	
Four Track Elevated (Mile)					Start: 0 + 00		0.00 Miles	
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles	
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles	
1 Intermediate Passenger Stations	Each	\$	-				\$ -	
2 Terminal Passenger Stations	Each	\$	-				\$ -	
Caltrain Passenger Station - At-Grade	Each	\$15,000,000				1	\$ 15,000,000	
Caltrain Passenger Station - On Structure	Each	\$15,000,000					\$ -	
Caltrain Passenger Station - In Tunnel or Subway	Each	\$15,000,000					\$ -	
Caltrain Passenger Station - In Trench	Each	\$15,000,000					\$ -	
3 Maintenance Facility	Each	\$ 123,924,884					\$ -	
4 Parking - Structures	space	\$	-				\$ -	
5 Parking - At Grade	space	\$	-				\$ -	
Rail & Utility Relocation								
1 Single Track Relocation (Temporary)	Mile	\$	2,000,896				\$ -	
2 Single Track Relocation (Permanent)	Mile	\$	2,000,896				\$ -	
3 Single Track Removal	Mile	\$	130,048				\$ -	
4 Major Utility Relocations - Dense Urban	Mile	\$	1,548,288				\$ -	
5 Major Utility Relocations - Urban	Mile	\$	1,084,416				\$ -	
6 Major Utility Relocations - Dense Suburban	Mile	\$	775,168				\$ -	
7 Major Utility Relocations - Suburban	Mile	\$	464,896				\$ -	
8 Major Utility Relocations - Undeveloped	Mile	\$	30,720				\$ -	
ROW (Not Included)								
ROW required for each segment								
1 Dense Urban	Acre	\$	2,786,321				\$ -	
2 Urban	Acre	\$	1,371,510				\$ -	
3 Dense Suburban	Acre	\$	908,134				\$ -	
4 Suburban	Acre	\$	208,418				\$ -	
5 Undeveloped	Acre	\$	3,642				\$ -	
ROW required for Temp. Construction Easement								
1 Dense Urban	Acre						\$ -	
2 Urban	Acre						\$ -	
3 Dense Suburban	Acre						\$ -	
4 Suburban	Acre						\$ -	
5 Undeveloped	Acre						\$ -	
Right-of-Way Required for Stations, Maintenance & Parking Facilities								
6 Dense Urban	Acre	\$	2,786,321				\$ -	
7 Urban	Acre	\$	1,371,510				\$ -	
8 Dense Suburban	Acre	\$	908,134				\$ -	
9 Suburban	Acre	\$	208,418				\$ -	
10 Undeveloped	Acre	\$	3,642				\$ -	
Environmental Mitigation = 3% Line Costs							\$ 1,407,594	
System Elements								
1 Signaling (ATC)	Mile	\$	2,070,000			6.44	\$ 13,329,545	
2 Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			6.44	\$ 3,477,273	
3 Wayside Protection System	Mile	\$	108,000			6.44	\$ 695,455	
Electrification Items								
1 Traction Power supply	Mile	\$	1,170,000			6.44	\$ 7,534,091	
2 Traction Power Distribution	Mile	\$	1,485,000			6.44	\$ 9,562,500	
Subtotal							\$ 82,926,244	
Program Implementation Costs (per screening)							\$ 21,146,192	
Program Implementation Costs								
Contingencies (per screening) (25%)							\$ 20,731,561	
Subtotal							\$ 124,803,997	
Subtotal (Rounded)							\$ 125,000,000	

COST ELEMENTS			UNIT	UNIT PRICE	Elevated Viaduct (HST only)			At-Grade (HST only)			Covered Trench (HST only)			Tunnel (HST only)					
Subsection 8				Base: 2009 (3rd Quarter)	B			B			B			B					
					Start: 2610 + 00	End: 2640 + 00	0.57 Miles	Start: 2610 + 00	End: 2640 + 00	0.57 Miles	Start: 2610 + 00	End: 2640 + 00	0.57 Miles	Start: 2610 + 00	End: 2640 + 00	0.57 Miles			
Subsection Dettails						Quant.	Cost			Quant.	Cost			Quant.	Cost				
Double Track At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 2610 + 00	End: 2640 + 00	0.57 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Double Track Elevated (Mile)					Start: 2610 + 00	End: 2640 + 00	0.57 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles				
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 2610 + 00	End: 2640 + 00	0.57 Miles				
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles				
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles				
Four Track Elevated (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Double Track Section - Total																			
1	Double Track Section - At Grade	Mile	\$	2,100,224			0.00	\$	-			0.57	\$	1,193,309		0	\$	-	
2	Double Track Section - On Structure	Mile	\$	4,700,160			0.57	\$	2,670,545			0.00	\$	-		0	\$	-	
3	Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160			0.00	\$	-			0.00	\$	-		0.57	\$	2,670,545	
4	Double Track Section - In Trench	Mile	\$	4,700,160			0.00	\$	-				\$	-		0.00	\$	-	
Four Track Section - Total																			
	Four-track Section - At Grade	Mile	\$	4,200,448			0.00	\$	-			0	\$	-		0.00	\$	-	
	Four-Track Section - On Structure	Mile	\$	9,400,320			0.00	\$	-			0	\$	-		0.00	\$	-	
	Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320			0.00	\$	-			0.00	\$	-		0.00	\$	-	
	Four-Track Section - In Trench	Mile	\$	9,400,320			0.00	\$	-				\$	-		0.00	\$	-	
Single Track - Total												0							
5	Single Track Section - At Grade	Mile	\$	1,549,312			0	\$	-			0	\$	-		0	\$	-	
6	Single Track Section - On structure	Mile	\$	2,350,080			0	\$	-			0	\$	-		0	\$	-	
7	Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080			0	\$	-			0	\$	-		0	\$	-	
8	Single Track Section - In Trench	Mile	\$	2,350,080			0	\$	-				\$	-		0	\$	-	
												0							
9	Freight Double Track - At Grade	Mile	\$	2,839,552			0	\$	-			0	\$	-		0	\$	-	
10	Freight Single Track - At Grade	Mile	\$	1,549,312			0	\$	-			0	\$	-		0	\$	-	
Earthwork Items																			
1	Site Preparation - Undeveloped	Acre	\$	9,216			7.58	\$	69,818			7.58	\$	69,818		0.00	\$	-	
2	Total Cut	CY	\$	6.45			0.00	\$	-			0.00	\$	-		611111.11	\$	3,942,400	
3	Total Fill	CY	\$	6.29				\$	-				\$	-		366666.67	\$	2,306,304	
4	Borrow	CY	\$	12.58				\$	-				\$	-		0.00	\$	-	
5	Spoil	CY	\$	12.58				\$	-				\$	-		244444.44	\$	3,075,072	
6	Landscape erosion Control	Acre	\$	6,144			7.58	\$	46,545			7.58	\$	46,545		0.00	\$	-	
7	Security Fencing (Both sides of ROW)	Mile	\$	144,384			0.00	\$	-			0.00	\$	-		0.00	\$	-	
8	Special Drainage Facilities	5% Earthwork						\$	5,818				\$	5,818			\$	-	
Structures, Tunnels, Walls																			
1	Standard Structure	Mile	\$	34,972,672			0.57	\$	19,870,836			0	\$	-		0.00	\$	-	
2	High Structure	Mile	\$	40,424,448				\$	-				\$	-			\$	-	
3	Long Span Structure	Mile	\$	61,919,232				\$	-				\$	-			\$	-	
4	Waterway Crossing - Primary	Mile	\$	85,342,208				\$	-				\$	-			\$	-	
5	Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408				\$	-				\$	-			\$	-	
6	Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264				\$	-				\$	-			\$	-	
7	Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312				\$	-				\$	-			\$	-	
8	Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896				\$	-				\$	-			\$	-	
9	Double Track Drill & Blast	Mile	\$	146,887,680			0.00	\$	-			0.00	\$	-		0.00	\$	-	
10	Double Track Mined (Soft Soil)	Mile	\$	79,200,000				\$	-				\$	-			\$	-	
	Double Track TBM (<6 Miles)	Mile	\$	106,637,312															
	Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896												0.57 Miles		60,589,382	
11	Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952				\$	-				\$	-			\$	-	
12	Crossovers	ea	\$	442,368				\$	-				\$	-			\$	-	
13	Cut & Cover Double Track Tunnel	Mile	\$	131,246,080				\$	-				0.57	\$	74,571,636				
14	Trench Short	Mile	\$	78,843,904			0.00	\$	-			0.00	\$	-		0.00	\$	-	
15	Trench Long	Mile	\$	57,524,224				\$	-				\$	-			\$	-	
16	Mechanical & Electrical for Tunnels	Mile	\$	11,848,704			0.00	\$	-				0.57	\$	6,732,218		0.57	6,732,218	
17	Retaining Walls	Mile	\$	8,613,888			0.00	\$	-			0.00	\$	-		0.00	\$	-	
18	Containment Walls	Mile	\$	5,907,456			0.00	\$	-			0.00	\$	-		0.00	\$	-	
19	Single Track Cut and Cover Subway	Mile	\$	131,246,080				\$	-				\$	-			\$	-	
	Four Track Drill & Blast	Mile	\$	293,775,360				\$	-				\$	-			\$	-	
	Four Track Mined (Soft Soil)	Mile	\$	158,400,000				\$	-				\$	-			\$	-	
	Four Track TBM (<6 Miles)	Mile	\$	213,274,624												0.00 Miles			
	Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792												0			
	Four Track Cut & Cover Tunnel	Mile	\$	262,492,160			0.00	\$	-				0.00	\$	-		0.00		
Grade Separations																			
1	Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352				\$	-				\$	-			\$	-	
	Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528					-				\$	-			\$	-	
2	Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680					0	\$	-			\$	-		\$	-	
3	Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568										\$	-		\$	-	
4	Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520										\$	-		\$	-	
5	Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216										\$	-		\$	-	
	Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816					0	\$	-			\$	-		\$	-	
6	Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328										\$	-		\$	-	
7	Street Bridging HSR Trench	ea	\$	1,398,784										\$	-		\$	-	
8	Minor Crossing Closures	ea	\$	87,040											\$	-		\$	-
Building Items																			

COST ELEMENTS			UNIT	UNIT PRICE	Elevated Viaduct (HST only)		At-Grade (HST only)				Covered Trench (HST only)				Tunnel (HST only)							
Subsection 8			Base: 2009 (3rd Quarter)	B			B				B				B							
				Start: 2610 + 00	End: 2640 + 00	0.57 Miles	Start: 2610 + 00	End: 2640 + 00	0.57 Miles	Start: 2610 + 00	End: 2640 + 00	0.57 Miles	Start: 2610 + 00	End: 2640 + 00	0.57 Miles							
Subsection Dedtails					Quant.	Cost			Quant.	Cost			Quant.	Cost			Quant.	Cost				
Double Track At-Grade (Mile)			Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 2610 + 00	End: 2640 + 00	0.57 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles					
Double Track Elevated (Mile)			Start: 2610 + 00	End: 2640 + 00	0.57 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles									
Double Track Tunnel (Mile)			Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 2610 + 00	End: 2640 + 00	0.57 Miles		Start: 2610 + 00	End: 2640 + 00	0.57 Miles					
Double Track Trench (Mile)			Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles					
Four Track Construction/Reconstruction At-Grade (Mile)			Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles					
Four Track Elevated (Mile)			Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00		0.00 Miles					
Four Track Tunnel (Mile)			Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles					
Four Track Trench (Mile)			Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles					
1 Intermediate Passenger Stations	Each	\$	-			\$	-			\$	-			\$	-			\$	-			
2 Terminal Passenger Stations	Each	\$	-			\$	-			\$	-			\$	-			\$	-			
Caltrain Passenger Station - At-Grade	Each	\$	15,000,000			\$	-			\$	-			\$	-			\$	-			
Caltrain Passenger Station - On Structure	Each	\$	15,000,000			\$	-			\$	-			\$	-			\$	-			
Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000			\$	-			\$	-			\$	-			\$	-			
Caltrain Passenger Station - In Trench	Each	\$	15,000,000			\$	-			\$	-			\$	-			\$	-			
3 Maintenance Facility	Each	\$	123,924,884			\$	-			\$	-			\$	-			\$	-			
4 Parking - Structures	space	\$	-			\$	-			\$	-			\$	-			\$	-			
5 Parking - At Grade	space	\$	-			\$	-			\$	-			\$	-			\$	-			
Rail & Utility Relocation																						
1 Single Track Relocation (Temporary)	Mile	\$	2,000,896			\$	-			\$	-			\$	-			\$	-			
2 Single Track Relocation (Permanent)	Mile	\$	2,000,896			\$	-			\$	-			\$	-			\$	-			
3 Single Track Removal	Mile	\$	130,048			\$	-			\$	-			\$	-			\$	-			
4 Major Utility Relocations - Dense Urban	Mile	\$	1,548,288			\$	-			\$	-			\$	-			\$	-			
5 Major Utility Relocations - Urban	Mile	\$	1,084,416			\$	-			\$	-			\$	-			\$	-			
6 Major Utility Relocations - Dense Suburban	Mile	\$	775,168			\$	-			\$	-			\$	-			\$	-			
7 Major Utility Relocations - Suburban	Mile	\$	464,896			\$	-			\$	-			\$	-			\$	-			
8 Major Utility Relocations - Undeveloped	Mile	\$	30,720			\$	-			\$	-			\$	-			\$	-			
ROW (Not Included)																						
ROW required for each segment																						
1 Dense Urban	Acre	\$	2,786,321			\$	-			\$	-			\$	-			\$	-			
2 Urban	Acre	\$	1,371,510			\$	-			\$	-			\$	-			\$	-			
3 Dense Suburban	Acre	\$	908,134			\$	-			\$	-			\$	-			\$	-			
4 Suburban	Acre	\$	208,418			\$	-			\$	-			\$	-			\$	-			
5 Undeveloped	Acre	\$	3,642			\$	-			\$	-			\$	-			\$	-			
ROW required for Temp. Construction Easement																						
1 Dense Urban	Acre					\$	-			\$	-							\$	-			
2 Urban	Acre					\$	-			\$	-							\$	-			
3 Dense Suburban	Acre					\$	-			\$	-							\$	-			
4 Suburban	Acre					\$	-			\$	-							\$	-			
5 Undeveloped	Acre					\$	-			\$	-							\$	-			
Right-of-Way Required for Stations, Maintenance & Parking Facilities																						
6 Dense Urban	Acre	\$	2,786,321			\$	-			\$	-			\$	-			\$	-			
7 Urban	Acre	\$	1,371,510			\$	-			\$	-			\$	-			\$	-			
8 Dense Suburban	Acre	\$	908,134			\$	-			\$	-			\$	-			\$	-			
9 Suburban	Acre	\$	208,418			\$	-			\$	-			\$	-			\$	-			
10 Undeveloped	Acre	\$	3,642			\$	-			\$	-			\$	-			\$	-			
Environmental Mitigation = 3% Line Costs						\$	679,907			\$	39,465			\$	2,812,931			\$	2,099,764			
System Elements																						
1 Signaling (ATC)	Mile	\$	2,070,000			0.57	\$	1,176,136			0.57	\$	1,176,136			0.57	\$	1,176,136		0.57	\$	1,176,136
2 Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			0.57	\$	306,818			0.57	\$	306,818			0.57	\$	306,818		0.57	\$	306,818
3 Wayside Protection System	Mile	\$	108,000			0.57	\$	61,364			0.57	\$	61,364			0.57	\$	61,364		0.57	\$	61,364
Electrification Items																						
1 Traction Power supply	Mile	\$	1,170,000			0.57	\$	664,773			0.57	\$	664,773			0.57	\$	664,773		0.57	\$	664,773
2 Traction Power Distribution	Mile	\$	1,485,000			0.57	\$	843,750			0.57	\$	843,750			0.57	\$	843,750		0.57	\$	843,750
Subtotal						\$	26,396,311			\$	4,407,797			\$	99,630,137			\$	75,144,751			
Program Implementation Costs (per screening)						\$	6,731,059			\$	1,123,988			\$	25,405,685			\$	19,161,911			
Program Implementation Costs																						
Contingencies (per screening) (25%)						\$	6,599,078			\$	1,101,949			\$	24,907,534			\$	18,786,188			
Subtotal						\$	39,726,449			\$	6,633,734			\$	149,943,356			\$	113,092,850			
Subtotal (Rounded)						\$	40,000,000			\$	7,000,000			\$	150,000,000			\$	113,000,000			

Subsection 9(a)	9(a)A (2.3 miles)				9(a)B (0.9 miles)
	Aerial Viaduct (HST Only)	At Grade (HST Only)	Covered Trench/Tunnel (HST Only)	Deep Tunnel (HST Only)	Aerial Viaduct (HST Only)
Capital Cost (\$2009 in Millions) does not include ROW	\$160 (2 tracks)	\$54 (2 tracks)	\$594 (2 tracks)	\$484 (2 tracks)	\$248 (2 tracks)
Acquisition Cost of Permanent ROW	Medium	Highest	Lowest	Lowest	Medium
Notes:		1. Caltrain Santa Clara station reconstructed to allow for 2 HST tracks. 2. Convert Hedding St to an underpass.	1. Caltrain Santa Clara station reconstructed to allow for 2 HST tracks.		1. HST San Jose station.

COST ELEMENTS			UNIT	UNIT PRICE	Elevated Viaduct (HST only)				At-Grade (HST only)				Covered Trench (HST only)				Tunnel (HST only)					
Subsection 9 (a)			Base: 2009 (3rd Quarter)		A				A				A				A					
					Start: 2640 + 00	End: 2760 + 00	2.27 Miles		Start: 2640 + 00	End: 2760 + 00	2.27 Miles		Start: 2640 + 00	End: 2760 + 00	2.27 Miles		Start: 2640 + 00	End: 2760 + 00	2.27 Miles			
Subsection Dettails					Quant.	Cost			Quant.	Cost			Quant.	Cost			Quant.	Cost				
Double Track At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 2640 + 00	End: 2760 + 00	2.27 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Double Track Elevated (Mile)				Start: 2640 + 00	End: 2760 + 00	2.27 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 2640 + 00	End: 2760 + 00	2.27 Miles				
Double Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 2640 + 00	End: 2760 + 00	2.27 Miles
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles				
Four Track Elevated (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles				
Four Track Tunnel (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Four Track Trench (Mile)				Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles				
Double Track Section - Total																						
1	Double Track Section - At Grade	Mile	\$	2,100,224		0	\$	-	2.27	\$	4,773,236			0.00	\$	-	0.00	\$	-			
2	Double Track Section - On Structure	Mile	\$	4,700,160		2.27	\$	10,682,182			0.00	\$	-	0.00	\$	-	0.00	\$	-			
3	Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160		0	\$	-			0.00	\$	-	2.27	\$	10,682,182	2.27	\$	10,682,182			
4	Double Track Section - In Trench	Mile	\$	4,700,160		0	\$	-			0.00	\$	-	0.00	\$	-	0.00	\$	-			
Four Track Section - Total																						
Four-track Section - At Grade			Mile	\$	4,200,448		0.00	\$	-	0.00	\$	-		0.00	\$	-		0.00	\$	-		
Four-Track Section - On Structure			Mile	\$	9,400,320		0.00	\$	-	0.00	\$	-		0.00	\$	-		0.00	\$	-		
Four-Track Section - In Tunnel or Subway			Mile	\$	9,400,320		0.00	\$	-	0.00	\$	-		0.00	\$	-		0.00	\$	-		
Four-Track Section - In Trench			Mile	\$	9,400,320		0.00	\$	-	0.00	\$	-		0.00	\$	-		0.00	\$	-		
Single Track - Total																						
5	Single Track Section - At Grade	Mile	\$	1,549,312		0	\$	-			0	\$	-		0	\$	-	0	\$	-		
6	Single Track Section - On structure	Mile	\$	2,350,080		0	\$	-			0	\$	-		0	\$	-	0	\$	-		
7	Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080		0	\$	-			0	\$	-		0	\$	-	0	\$	-		
8	Single Track Section - In Trench	Mile	\$	2,350,080		0	\$	-			0	\$	-		0	\$	-	0	\$	-		
9	Freight Double Track - At Grade	Mile	\$	2,839,552		0	\$	-			0	\$	-		0	\$	-	0	\$	-		
10	Freight Single Track - At Grade	Mile	\$	1,549,312		0	\$	-			0	\$	-		0	\$	-	0	\$	-		
Earthwork Items																						
1	Site Preparation - Undeveloped	Acre	\$	9,216		17.91	\$	165,025			17.91	\$	165,025		17.91	\$	165,025		0.00	\$	-	
2	Total Cut	CY	\$	6.45		0.00	\$	-			0.00	\$	-		1155555.56	\$	7,454,720		977777.78	\$	6,307,840	
3	Total Fill	CY	\$	6.29		0.00	\$	-			0.00	\$	-		577777.78	\$	3,634,176		0.00	\$	-	
4	Borrow	CY	\$	12.58		0.00	\$	-			0.00	\$	-		0.00	\$	-		0.00	\$	-	
5	Spoil	CY	\$	12.58		0.00	\$	-			0.00	\$	-		577777.78	\$	7,268,352		977777.78	\$	12,300,288	
6	Landscape erosion Control	Acre	\$	6,144		0.00	\$	-			0.00	\$	-		0.00	\$	-		0.00	\$	-	
7	Security Fencing (Both sides of ROW)	Mile	\$	144,384		0.00	\$	-			0.00	\$	-		0.00	\$	-		0.00	\$	-	
8	Special Drainage Facilities	5% Earthwork					\$	8,251			\$	8,251			\$	926,114			\$	930,406		
Structures, Tunnels, Walls																						
1	Standard Structure	Mile	\$	34,972,672		2.27	\$	79,483,345			0.00	\$	-		0	\$	-		0	\$	-	
2	High Structure	Mile	\$	40,424,448			\$	-				\$	-			\$	-			\$	-	
3	Long Span Structure	Mile	\$	61,919,232			\$	-				\$	-			\$	-			\$	-	
4	Waterway Crossing - Primary	Mile	\$	85,342,208			\$	-				\$	-			\$	-			\$	-	
5	Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408		0.01	\$	871,680				\$	-		0.01	\$	697,344		0.01	\$	697,344	
6	Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264			\$	-				\$	-			\$	-			\$	-	
7	Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312			\$	-				\$	-			\$	-			\$	-	
8	Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896			\$	-				\$	-			\$	-			\$	-	
9	Double Track Drill & Blast	Mile	\$	146,887,680		0.00	\$	-			0.00	\$	-			\$	-			\$	-	
10	Double Track Mined (Soft Soil)	Mile	\$	79,200,000			\$	-				\$	-			\$	-			\$	-	
	Double Track TBM (<6 Miles)	Mile	\$	106,637,312															0.00	\$	-	
	Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896															2.27	\$	242,357,527	
11	Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952			\$	-				\$	-			\$	-			\$	-	
12	Crossovers	ea	\$	442,368			\$	-				\$	-			\$	-			\$	-	
13	Cut & Cover Double Track Tunnel	Mile	\$	131,246,080		0.00	\$	-			0.00	\$	-		2.27	\$	298,286,545			\$	-	
14	Trench Short	Mile	\$	78,843,904		0.00	\$	-			0.00	\$	-		0.00	\$	-		0.00	\$	-	
15	Trench Long	Mile	\$	57,524,224			\$	-				\$	-			\$	-			\$	-	
16	Mechanical & Electrical for Tunnels	Mile	\$	11,848,704		0.00	\$	-			0.00	\$	-		2.27	\$	26,928,873		2.27	\$	26,928,873	
17	Retaining Walls	Mile	\$	8,613,888		0.00	\$	-			0.00	\$	-		0.00	\$	-		0.00	\$	-	
18	Containment Walls	Mile	\$	5,907,456		0.00	\$	-			0.00	\$	-		0.00	\$	-		0.00	\$	-	
19	Single Track Cut and Cover Subway	Mile	\$	131,246,080			\$	-				\$	-			\$	-			\$	-	
	Four Track Drill & Blast	Mile	\$	293,775,360			\$	-				\$	-			\$	-			\$	-	
	Four Track Mined (Soft Soil)	Mile	\$	158,400,000			\$	-				\$	-			\$	-			\$	-	
	Four Track TBM (<6 Miles)	Mile	\$	213,274,624															0.00	\$	-	
	Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792															0.00	\$	-	
	Four Track Cut & Cover Tunnel	Mile	\$	262,492,160		0.00	\$	-			0.00	\$	-		0.00	\$	-		0.00	\$	-	
Grade Separations																						
1	Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352			\$	-				\$	-			\$	-			\$	-	
	Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528			\$	-				\$	-			\$	-			\$	-	
2	Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680			\$	-	1	\$	2,759,680					\$	-			\$	-	
3	Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568			\$	-				\$	-			\$	-			\$	-	
4	Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520			\$	-			0	\$	-		0	\$	-			\$	-	
5	Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216			\$	-				\$	-			\$	-			\$	-	
	Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816			\$	-				\$	-			\$	-			\$	-	
6	Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328			\$	-				\$	-			\$	-			\$	-	
7	Street Bridging HSR Trench	ea	\$	1,398,784			\$	-				\$	-			\$	-			\$	-	
8	Minor Crossing Closures	ea	\$	87,040			\$	-				\$	-			\$	-			\$	-	
Building Items																						

COST ELEMENTS			UNIT	UNIT PRICE	Elevated Viaduct (HST only)		At-Grade (HST only)				Covered Trench (HST only)				Tunnel (HST only)					
Subsection 9 (a)				Base: 2009 (3rd Quarter)	A		A				A				A					
					Start: 2640 + 00	End: 2760 + 00	2.27 Miles		Start: 2640 + 00	End: 2760 + 00	2.27 Miles		Start: 2640 + 00	End: 2760 + 00	2.27 Miles		Start: 2640 + 00	End: 2760 + 00	2.27 Miles	
Subsection Dedtails						Quant.	Cost			Quant.	Cost			Quant.	Cost			Quant.	Cost	
Double Track At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 2640 + 00	End: 2760 + 00	2.27 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)					Start: 2640 + 00	End: 2760 + 00	2.27 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 2640 + 00	End: 2760 + 00	2.27 Miles		Start: 2640 + 00	End: 2760 + 00	2.27 Miles	
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Elevated (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles	
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles		Start: 0 + 00		0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles		Start: 0 + 00	End: 0 + 00	0.00 Miles	
1 Intermediate Passenger Stations	Each	\$	-				\$ -				\$ -				\$ -				\$ -	
2 Terminal Passenger Stations	Each	\$	-				\$ -				\$ -				\$ -				\$ -	
Caltrain Passenger Station - At-Grade	Each	\$	15,000,000				\$ -			1	15,000,000				\$ -				\$ -	
Caltrain Passenger Station - On Structure	Each	\$	15,000,000			0	\$ -				\$ -				\$ -				\$ -	
Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000				\$ -				\$ -	1		15,000,000	\$ -				\$ -	
Caltrain Passenger Station - In Trench	Each	\$	15,000,000				\$ -				\$ -				\$ -			0	\$ -	
3 Maintenance Facility	Each	\$	123,921,884				\$ -				\$ -				\$ -				\$ -	
4 Parking - Structures	space	\$	-				\$ -				\$ -				\$ -				\$ -	
5 Parking - At Grade	space	\$	-				\$ -				\$ -				\$ -				\$ -	
Rail & Utility Relocation																				
1 Single Track Relocation (Temporary)	Mile	\$	2,000,896				\$ -				\$ -				\$ -				\$ -	
2 Single Track Relocation (Permanent)	Mile	\$	2,000,896				\$ -				\$ -				\$ -				\$ -	
3 Single Track Removal	Mile	\$	130,048				\$ -				\$ -				\$ -				\$ -	
4 Major Utility Relocations - Dense Urban	Mile	\$	1,548,288				\$ -				\$ -				\$ -				\$ -	
5 Major Utility Relocations - Urban	Mile	\$	1,084,416				\$ -				\$ -				\$ -				\$ -	
6 Major Utility Relocations - Dense Suburban	Mile	\$	775,168				\$ -				\$ -				\$ -				\$ -	
7 Major Utility Relocations - Suburban	Mile	\$	464,896				\$ -				\$ -				\$ -				\$ -	
8 Major Utility Relocations - Undeveloped	Mile	\$	30,720				\$ -				\$ -				\$ -				\$ -	
ROW (Not Included)																				
ROW required for each segment																				
1 Dense Urban	Acre	\$	2,786,321				\$ -				\$ -				\$ -				\$ -	
2 Urban	Acre	\$	1,371,510				\$ -				\$ -				\$ -				\$ -	
3 Dense Suburban	Acre	\$	908,134				\$ -				\$ -				\$ -				\$ -	
4 Suburban	Acre	\$	208,418				\$ -				\$ -				\$ -				\$ -	
5 Undeveloped	Acre	\$	3,642				\$ -				\$ -				\$ -				\$ -	
ROW required for Temp. Construction Easement																				
1 Dense Urban	Acre						\$ -				\$ -				\$ -				\$ -	
2 Urban	Acre						\$ -				\$ -				\$ -				\$ -	
3 Dense Suburban	Acre						\$ -				\$ -				\$ -				\$ -	
4 Suburban	Acre						\$ -				\$ -				\$ -				\$ -	
5 Undeveloped	Acre						\$ -				\$ -				\$ -				\$ -	
Right-of-Way Required for Stations, Maintenance & Parking Facilities																				
6 Dense Urban	Acre	\$	2,786,321				\$ -				\$ -				\$ -				\$ -	
7 Urban	Acre	\$	1,371,510				\$ -				\$ -				\$ -				\$ -	
8 Dense Suburban	Acre	\$	908,134				\$ -				\$ -				\$ -				\$ -	
9 Suburban	Acre	\$	208,418				\$ -				\$ -				\$ -				\$ -	
10 Undeveloped	Acre	\$	3,642				\$ -				\$ -				\$ -				\$ -	
Environmental Mitigation = 3% Line Costs							\$ 2,736,314				\$ 681,186				\$ 11,131,300				\$ 9,006,134	
System Elements																				
1 Signaling (ATC)	Mile	\$	2,070,000			2.27	\$ 4,704,545			2.27	\$ 4,704,545			2.27	\$ 4,704,545			2.27	\$ 4,704,545	
2 Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			2.27	\$ 1,227,273			2.27	\$ 1,227,273			2.27	\$ 1,227,273			2.27	\$ 1,227,273	
3 Wayside Protection System	Mile	\$	108,000			2.27	\$ 245,455			2.27	\$ 245,455			2.27	\$ 245,455			2.27	\$ 245,455	
Electrification Items																				
1 Traction Power supply	Mile	\$	1,170,000			2.27	\$ 2,659,091			2.27	\$ 2,659,091			2.27	\$ 2,659,091			2.27	\$ 2,659,091	
2 Traction Power Distribution	Mile	\$	1,485,000			2.27	\$ 3,375,000			2.27	\$ 3,375,000			2.27	\$ 3,375,000			2.27	\$ 3,375,000	
Subtotal							\$ 106,158,161				\$ 35,598,742				\$ 394,385,994				\$ 321,421,958	
Program Implementation Costs (per screening)							\$ 27,070,331				\$ 9,077,679				\$ 100,568,428				\$ 81,962,599	
Program Implementation Costs																				
Contingencies (per screening) (25%)							\$ 26,539,540				\$ 8,899,685				\$ 98,596,498				\$ 80,355,489	
Subtotal							\$ 159,768,033				\$ 53,576,106				\$ 593,550,921				\$ 483,740,046	
Subtotal (Rounded)							\$ 160,000,000				\$ 54,000,000				\$ 594,000,000				\$ 484,000,000	

COST ELEMENTS			UNIT	UNIT PRICE	Elevated Viaduct			
Subsection 9 (a)				Base: 2009 (3rd Quarter)	B			
					Start: 2760 + 00	End: 2808 + 00	0.91 Miles	
Subsection Dedtails							Quant.	Cost
Double Track At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)					Start: 2760 + 00	End: 2808 + 00	0.91 Miles	
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles	
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00		0.00 Miles	
Four Track Elevated (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles	
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles	
Double Track Section - Total								
1	Double Track Section - At Grade	Mile	\$	2,100,224			0.00	\$ -
2	Double Track Section - On Structure	Mile	\$	4,700,160			0.91	\$ 4,272,873
3	Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160			0.00	\$ -
4	Double Track Section - In Trench	Mile	\$	4,700,160			0.00	\$ -
Four Track Section - Total								
	Four-track Section - At Grade	Mile	\$	4,200,448			0.00	\$ -
	Four-Track Section - On Structure	Mile	\$	9,400,320			0.00	\$ -
	Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320			0.00	\$ -
	Four-Track Section - In Trench	Mile	\$	9,400,320			0.00	\$ -
Single Track - Total								
5	Single Track Section - At Grade	Mile	\$	1,549,312			0	\$ -
6	Single Track Section - On structure	Mile	\$	2,350,080			0	\$ -
7	Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080			0	\$ -
8	Single Track Section - In Trench	Mile	\$	2,350,080			0	\$ -
9	Freight Double Track - At Grade	Mile	\$	2,839,552			0	\$ -
10	Freight Single Track - At Grade	Mile	\$	1,549,312			0	\$ -
Earthwork Items								
1	Site Preparation - Undeveloped	Acre	\$	9,216			7.16	\$ 66,010
2	Total Cut	CY	\$	6.45			0	\$ -
3	Total Fill	CY	\$	6.29			0	\$ -
4	Borrow	CY	\$	12.58			0.00	\$ -
5	Spoil	CY	\$	12.58			0.00	\$ -
6	Landscape erosion Control	Acre	\$	6,144			0.00	\$ -
7	Security Fencing (Both sides of ROW)	Mile	\$	144,384			0.00	\$ -
8	Special Drainage Facilities	5% Earthwork						\$ 3,300
Structures, Tunnels, Walls								
1	Standard Structure	Mile	\$	34,972,672			0.91	\$ 31,793,338
2	High Structure	Mile	\$	40,424,448				\$ -
3	Long Span Structure	Mile	\$	61,919,232				\$ -
4	Waterway Crossing - Primary	Mile	\$	85,342,208				\$ -
5	Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408				\$ -
6	Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264				\$ -
7	Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312				\$ -
8	Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896				\$ -
9	Double Track Drill & Blast	Mile	\$	146,887,680			0	\$ -
10	Double Track Mined (Soft Soil)	Mile	\$	79,200,000				\$ -
	Double Track TBM (<6 Miles)	Mile	\$	106,637,312				
	Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896				
11	Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952				\$ -
12	Crossovers	ea	\$	442,368				\$ -
13	Cut & Cover Double Track Tunnel	Mile	\$	131,246,080			0	\$ -
14	Trench Short	Mile	\$	78,843,904			0	\$ -
15	Trench Long	Mile	\$	57,524,224				\$ -
16	Mechanical & Electrical for Tunnels	Mile	\$	11,848,704			0	\$ -
17	Retaining Walls	Mile	\$	8,613,888			0	\$ -
18	Containment Walls	Mile	\$	5,907,456			0	\$ -
19	Single Track Cut and Cover Subway	Mile	\$	131,246,080				\$ -
	Four Track Drill & Blast	Mile	\$	293,775,360				\$ -
	Four Track Mined (Soft Soil)	Mile	\$	158,400,000				\$ -
	Four Track TBM (<6 Miles)	Mile	\$	213,274,624				
	Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792				
	Four Track Cut & Cover Tunnel	Mile	\$	262,492,160			0.00	\$ -
Grade Separations								
1	Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352				\$ -
	Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528				\$ -
2	Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680				\$ -
3	Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568				\$ -
4	Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520				\$ -
5	Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216				\$ -
	Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816				\$ -
6	Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328				\$ -
7	Street Bridging HSR Trench	ea	\$	1,398,784				\$ -
8	Minor Crossing Closures	ea	\$	87,040				\$ -
Building Items								

COST ELEMENTS			UNIT	UNIT PRICE	Elevated Viaduct			
Subsection 9 (a)				Base: 2009 (3rd Quarter)	B			
					Start: 2760 + 00	End: 2808 + 00	0.91 Miles	
Subsection Dedtails							Quant.	Cost
Double Track At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)					Start: 2760 + 00	End: 2808 + 00	0.91 Miles	
Double Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles	
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00		0.00 Miles	
Four Track Elevated (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Tunnel (Mile)					Start: 0 + 00		0.00 Miles	
Four Track Trench (Mile)					Start: 0 + 00		0.00 Miles	
1	Intermediate Passenger Stations	Each	\$	-				\$ -
	Intermediate Passenger Stations (Diridon)	Each	\$	119,521,386			1	\$ 119,521,386
2	Terminal Passenger Stations	Each	\$	-				\$ -
	Caltrain Passenger Station - At-Grade	Each	\$	15,000,000				\$ -
	Caltrain Passenger Station - On Structure	Each	\$	15,000,000			0	\$ -
	Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000				\$ -
	Caltrain Passenger Station - In Trench	Each	\$	15,000,000				\$ -
3	Maintenance Facility	Each	\$	123,921,884				\$ -
4	Parking - Structures	space	\$	-				\$ -
5	Parking - At Grade	space	\$	-				\$ -
Rail & Utility Relocation								
1	Single Track Relocation (Temporary)	Mile	\$	2,000,896				\$ -
2	Single Track Relocation (Permanent)	Mile	\$	2,000,896				\$ -
3	Single Track Removal	Mile	\$	130,048				\$ -
4	Major Utility Relocations - Dense Urban	Mile	\$	1,548,288				\$ -
5	Major Utility Relocations - Urban	Mile	\$	1,084,416				\$ -
6	Major Utility Relocations - Dense Suburban	Mile	\$	775,168				\$ -
7	Major Utility Relocations - Suburban	Mile	\$	464,896				\$ -
8	Major Utility Relocations - Undeveloped	Mile	\$	30,720				\$ -
ROW (Not Included)								
ROW required for each segment								
1	Dense Urban	Acre	\$	2,786,321				\$ -
2	Urban	Acre	\$	1,371,510				\$ -
3	Dense Suburban	Acre	\$	908,134				\$ -
4	Suburban	Acre	\$	208,418				\$ -
5	Undeveloped	Acre	\$	3,642				\$ -
ROW required for Temp. Construction Easement								
1	Dense Urban	Acre						\$ -
2	Urban	Acre						\$ -
3	Dense Suburban	Acre						\$ -
4	Suburban	Acre						\$ -
5	Undeveloped	Acre						\$ -
Right-of-Way Required for Stations, Maintenance & Parking Facilities								
6	Dense Urban	Acre	\$	2,786,321				\$ -
7	Urban	Acre	\$	1,371,510				\$ -
8	Dense Suburban	Acre	\$	908,134				\$ -
9	Suburban	Acre	\$	208,418				\$ -
10	Undeveloped	Acre	\$	3,642				\$ -
Environmental Mitigation = 3% Line Costs								\$ 4,669,707
System Elements								
1	Signaling (ATC)	Mile	\$	2,070,000			0.91	\$ 1,881,818
2	Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			0.91	\$ 490,909
3	Wayside Protection System	Mile	\$	108,000				
Electrification Items							0.91	\$ -
1	Traction Power supply	Mile	\$	1,170,000			0.91	\$ 1,063,636
2	Traction Power Distribution	Mile	\$	1,485,000			0.91	\$ 1,350,000
Subtotal								\$ 165,112,978
Program Implementation Costs (per screening)								\$ 42,103,809
Program Implementation Costs								
Contingencies (per screening) (25%)								\$ 41,278,245
Subtotal								\$ 248,495,032
Subtotal (Rounded)								\$ 248,000,000

Subsection 9(b)	9(b)A (2.3 miles)	9(b)B (0.9 miles)
	Deep Tunnel (HST Only)	Deep Tunnel (HST Only)
Capital Cost (\$2009 in Millions) does not include ROW	\$484 (2 tracks)	\$383 (2 tracks)
Acquisition Cost of Permanent ROW	Lowest	Lowest
Notes:		1. HST San Jose station.

COST ELEMENTS			UNIT	UNIT PRICE	Tunnel (HST only)			
Subsection 9(b)				Base: 2009 (3rd Quarter)	A			
					Start: 2640 + 00	End: 2760 + 00	2.27 Miles	
Subsection Dedtails							Quant.	Cost
Double Track At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles	
Double Track Tunnel (Mile)					Start: 2640 + 00	End: 2760 + 00	2.27 Miles	
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00		0.00 Miles	
Four Track Elevated (Mile)					Start: 0 + 00		0.00 Miles	
Four Track Tunnel (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Trench (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Section - Total								
1	Double Track Section - At Grade	Mile	\$	2,100,224			0.00	\$ -
2	Double Track Section - On Structure	Mile	\$	4,700,160			0.00	\$ -
3	Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160			2.27	\$ 10,682,182
4	Double Track Section - In Trench	Mile	\$	4,700,160			0.00	\$ -
Four Track Section - Total								
	Four-track Section - At Grade	Mile	\$	4,200,448			0.00	\$ -
	Four-Track Section - On Structure	Mile	\$	9,400,320			0.00	\$ -
	Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320			0.00	\$ -
	Four-Track Section - In Trench	Mile	\$	9,400,320			0.00	\$ -
Single Track - Total								
5	Single Track Section - At Grade	Mile	\$	1,549,312			0	\$ -
6	Single Track Section - On structure	Mile	\$	2,350,080			0	\$ -
7	Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080			0	\$ -
8	Single Track Section - In Trench	Mile	\$	2,350,080			0	\$ -
9	Freight Double Track - At Grade	Mile	\$	2,839,552			0	\$ -
10	Freight Single Track - At Grade	Mile	\$	1,549,312			0	\$ -
Earthwork Items								
1	Site Preparation - Undeveloped	Acre	\$	9,216			0.00	\$ -
2	Total Cut	CY	\$	6.45			977777.78	\$ 6,307,840
3	Total Fill	CY	\$	6.29			0.00	\$ -
4	Borrow	CY	\$	12.58			0.00	\$ -
5	Spoil	CY	\$	12.58			977777.78	\$ 12,300,288
6	Landscape erosion Control	Acre	\$	6,144			0.00	\$ -
7	Security Fencing (Both sides of ROW)	Mile	\$	144,384			0.00	\$ -
8	Special Drainage Facilities	5% Earthwork						\$ 930,406
Structures, Tunnels, Walls								
1	Standard Structure	Mile	\$	34,972,672			0	\$ -
2	High Structure	Mile	\$	40,424,448				\$ -
3	Long Span Structure	Mile	\$	61,919,232				\$ -
4	Waterway Crossing - Primary	Mile	\$	85,342,208				\$ -
5	Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408			0.01	\$ 697,344
6	Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264				\$ -
7	Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312				\$ -
8	Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896				\$ -
9	Double Track Drill & Blast	Mile	\$	146,887,680				\$ -
10	Double Track Mined (Soft Soil)	Mile	\$	79,200,000			0.00	\$ -
	Double Track TBM (<6 Miles)	Mile	\$	106,637,312			2.27	\$ 242,357,527
	Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896				\$ -
11	Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952				\$ -
12	Crossovers	ea	\$	442,368				\$ -
13	Cut & Cover Double Track Tunnel	Mile	\$	131,246,080				\$ -
14	Trench Short	Mile	\$	78,843,904			0.00	\$ -
15	Trench Long	Mile	\$	57,524,224				\$ -
16	Mechanical & Electrical for Tunnels	Mile	\$	11,848,704			2.27	\$ 26,928,873
17	Retaining Walls	Mile	\$	8,613,888			0.00	\$ -
18	Containment Walls	Mile	\$	5,907,456			0.00	\$ -
19	Single Track Cut and Cover Subway	Mile	\$	131,246,080				\$ -
	Four Track Drill & Blast	Mile	\$	293,775,360				\$ -
	Four Track Mined (Soft Soil)	Mile	\$	158,400,000			0.00	\$ -
	Four Track TBM (<6 Miles)	Mile	\$	213,274,624			0.00	\$ -
	Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792				\$ -
	Four Track Cut & Cover Tunnel	Mile	\$	262,492,160			0.00	\$ -
Grade Separations								
1	Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352				\$ -
	Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528				\$ -
2	Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680				\$ -
3	Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568				\$ -
4	Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520			0	\$ -
5	Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216				\$ -
	Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816				\$ -
6	Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328				\$ -
7	Street Bridging HSR Trench	ea	\$	1,398,784				\$ -
8	Minor Crossing Closures	ea	\$	87,040				\$ -
Building Items								

COST ELEMENTS		UNIT	UNIT PRICE	Tunnel (HST only)		
Subsection 9(b)		Base: 2009 (3rd Quarter)		A		
				Start: 2640 + 00	End: 2760 + 00	2.27 Miles
Subsection Dedtails						
					Quant.	Cost
Double Track At-Grade (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles
Double Track Elevated (Mile)				Start: 0 + 00		0.00 Miles
Double Track Tunnel (Mile)				Start: 2640 + 00	End: 2760 + 00	2.27 Miles
Double Track Trench (Mile)				Start: 0 + 00		0.00 Miles
Four Track Construction/Reconstruction At-Grade (Mile)				Start: 0 + 00		0.00 Miles
Four Track Elevated (Mile)				Start: 0 + 00		0.00 Miles
Four Track Tunnel (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles
Four Track Trench (Mile)				Start: 0 + 00	End: 0 + 00	0.00 Miles
1 Intermediate Passenger Stations	Each	\$	-			\$ -
2 Terminal Passenger Stations	Each	\$	-			\$ -
Caltrain Passenger Station - At-Grade	Each	\$	15,000,000			\$ -
Caltrain Passenger Station - On Structure	Each	\$	15,000,000			\$ -
Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000			\$ -
Caltrain Passenger Station - In Trench	Each	\$	15,000,000			\$ -
3 Maintenance Facility	Each	\$	123,921,884			\$ -
4 Parking - Structures	space	\$	-			\$ -
5 Parking - At Grade	space	\$	-			\$ -
Rail & Utility Relocation						
1 Single Track Relocation (Temporary)	Mile	\$	2,000,896			\$ -
2 Single Track Relocation (Permanent)	Mile	\$	2,000,896			\$ -
3 Single Track Removal	Mile	\$	130,048			\$ -
4 Major Utility Relocations - Dense Urban	Mile	\$	1,548,288			\$ -
5 Major Utility Relocations - Urban	Mile	\$	1,084,416			\$ -
6 Major Utility Relocations - Dense Suburban	Mile	\$	775,168			\$ -
7 Major Utility Relocations - Suburban	Mile	\$	464,896			\$ -
8 Major Utility Relocations - Undeveloped	Mile	\$	30,720			\$ -
ROW (Not Included)						
ROW required for each segment						
1 Dense Urban	Acre	\$	2,786,321			\$ -
2 Urban	Acre	\$	1,371,510			\$ -
3 Dense Suburban	Acre	\$	908,134			\$ -
4 Suburban	Acre	\$	208,418			\$ -
5 Undeveloped	Acre	\$	3,642			\$ -
ROW required for Temp. Construction Easement						
1 Dense Urban	Acre					\$ -
2 Urban	Acre					\$ -
3 Dense Suburban	Acre					\$ -
4 Suburban	Acre					\$ -
5 Undeveloped	Acre					\$ -
Right-of-Way Required for Stations, Maintenance & Parking Facilities						
6 Dense Urban	Acre	\$	2,786,321			\$ -
7 Urban	Acre	\$	1,371,510			\$ -
8 Dense Suburban	Acre	\$	908,134			\$ -
9 Suburban	Acre	\$	208,418			\$ -
10 Undeveloped	Acre	\$	3,642			\$ -
Environmental Mitigation = 3% Line Costs						\$ 9,006,134
System Elements						
1 Signaling (ATC)	Mile	\$	2,070,000			2.27 \$ 4,704,545
2 Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			2.27 \$ 1,227,273
3 Wayside Protection System	Mile	\$	108,000			2.27 \$ 245,455
Electrification Items						
1 Traction Power supply	Mile	\$	1,170,000			2.27 \$ 2,659,091
2 Traction Power Distribution	Mile	\$	1,485,000			2.27 \$ 3,375,000
Subtotal						\$ 321,421,958
Program Implementation Costs (per screening)						\$ 81,962,599
Program Implementation Costs						
Contingencies (per screening) (25%)						\$ 80,355,489
Subtotal						\$ 483,740,046
Subtotal (Rounded)						\$ 484,000,000

COST ELEMENTS			UNIT	UNIT PRICE	Tunnel (HST only)			
Subsection 9(b)			Base: 2009 (3rd Quarter)		B			
					Start: 2760 + 00	End: 2809 + 00	0.93 Miles	
Subsection Dedtails							Quant.	Cost
Double Track At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles	
Double Track Tunnel (Mile)					Start: 2760 + 00	End: 2809 + 00	0.93 Miles	
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles	
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00		0.00 Miles	
Four Track Elevated (Mile)					Start: 0 + 00		0.00 Miles	
Four Track Tunnel (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles	
Four Track Trench (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles	
Double Track Section - Total								
1 Double Track Section - At Grade	Mile	\$	2,100,224				0.00	\$ -
2 Double Track Section - On Structure	Mile	\$	4,700,160				0.00	\$ -
3 Double Track Section - In Tunnel or Subway	Mile	\$	4,700,160				0.93	\$ 4,361,891
4 Double Track Section - In Trench	Mile	\$	4,700,160				0.00	\$ -
Four Track Section - Total								
Four-track Section - At Grade	Mile	\$	4,200,448				0.00	\$ -
Four-Track Section - On Structure	Mile	\$	9,400,320				0.00	\$ -
Four-Track Section - In Tunnel or Subway	Mile	\$	9,400,320				0.00	\$ -
Four-Track Section - In Trench	Mile	\$	9,400,320				0.00	\$ -
Single Track - Total								
5 Single Track Section - At Grade	Mile	\$	1,549,312				0	\$ -
6 Single Track Section - On structure	Mile	\$	2,350,080				0	\$ -
7 Single Track Section - In Tunnel or Subway	Mile	\$	2,350,080				0	\$ -
8 Single Track Section - In Trench	Mile	\$	2,350,080				0	\$ -
9 Freight Double Track - At Grade	Mile	\$	2,839,552				0	\$ -
10 Freight Single Track - At Grade	Mile	\$	1,549,312				0	\$ -
Earthwork Items								
1 Site Preparation - Undeveloped	Acre	\$	9,216				0.00	\$ -
2 Total Cut	CY	\$	6.45				399259.26	\$ 2,575,701
3 Total Fill	CY	\$	6.29				0.00	\$ -
4 Borrow	CY	\$	12.58				0.00	\$ -
5 Spoil	CY	\$	12.58				399259.26	\$ 5,022,618
6 Landscape erosion Control	Acre	\$	6,144				0.00	\$ -
7 Security Fencing (Both sides of ROW)	Mile	\$	144,384				0.00	\$ -
8 Special Drainage Facilities	5% Earthwork							\$ 379,916
Structures, Tunnels, Walls								
1 Standard Structure	Mile	\$	34,972,672				0	\$ -
2 High Structure	Mile	\$	40,424,448					\$ -
3 Long Span Structure	Mile	\$	61,919,232					\$ -
4 Waterway Crossing - Primary	Mile	\$	85,342,208					\$ -
5 Waterway Crossing - Secondary (Irrigation Canal)	Mile	\$	92,049,408				0.01	\$ 697,344
6 Twin Single Track Drill&Blast (<6 Miles)	Mile	\$	142,731,264					\$ -
7 Twin Single Track TBM (<6 Miles)	Mile	\$	106,637,312					\$ -
8 Twin Single Track TBM w/3rd Tube (<6 Miles)	Mile	\$	176,720,896					\$ -
9 Double Track Drill & Blast	Mile	\$	146,887,680					\$ -
10 Double Track Mined (Soft Soil)	Mile	\$	79,200,000				0.00	\$ -
Double Track TBM (<6 Miles)	Mile	\$	106,637,312				0.93	\$ 98,962,657
Double Track TBM w/3rd Tube (>6 Miles)	Mile	\$	176,720,896					\$ -
11 Seismic Chamber (Drill & Blast/Mined)	ea	\$	126,205,952					\$ -
12 Crossovers	ea	\$	442,368					\$ -
13 Cut & Cover Double Track Tunnel	Mile	\$	131,246,080					\$ -
14 Trench Short	Mile	\$	78,843,904				0.00	\$ -
15 Trench Long	Mile	\$	57,524,224					\$ -
16 Mechanical & Electrical for Tunnels	Mile	\$	11,848,704				0.93	\$ 10,995,956
17 Retaining Walls	Mile	\$	8,613,888				0.00	\$ -
18 Containment Walls	Mile	\$	5,907,456				0.00	\$ -
19 Single Track Cut and Cover Subway	Mile	\$	131,246,080					\$ -
Four Track Drill & Blast	Mile	\$	293,775,360					\$ -
Four Track Mined (Soft Soil)	Mile	\$	158,400,000					\$ -
Four Track TBM (<6 Miles)	Mile	\$	213,274,624					\$ -
Four Track TBM w/3rd Tube (>6 Miles)	Mile	\$	353,441,792					\$ -
Four Track Cut & Cover Tunnel	Mile	\$	262,492,160				0.00	\$ -
Grade Separations								
1 Roadway Crossing HSR - 4 Lane Roadway Under 2 Tracks (Urban)	ea	\$	13,284,352					\$ -
Roadway Crossing HSR - 4 Lane Roadway Under 4 Tracks (Urban)	ea	\$	19,926,528					\$ -
2 Roadway Crossing HSR - 2 Lane Roadway Under 4 Tracks (Suburban)	ea	\$	2,759,680					\$ -
3 Roadway Crossing HSR - 2 Lane Roadway Under 2 Tracks (Undeveloped)	ea	\$	2,029,568					\$ -
4 Roadway Crossing HSR - 4 Lane Roadway Over 4 Tracks (Urban)	ea	\$	3,563,520					\$ -
5 Roadway Crossing HSR - 4 Lane Roadway Over 2 Tracks (Suburban)	ea	\$	3,593,216					\$ -
Roadway Crossing HSR - 2 Lane Roadway Over 4 Tracks (Urban)	ea	\$	2,850,816					\$ -
6 Roadway Crossing HSR - 2 Lane Roadway Over 2 Tracks (Undeveloped)	ea	\$	3,171,328					\$ -
7 Street Bridging HSR Trench	ea	\$	1,398,784					\$ -
8 Minor Crossing Closures	ea	\$	87,040					\$ -
Building Items								

COST ELEMENTS				UNIT	UNIT PRICE	Tunnel (HST only)			
Subsection 9(b)					Base: 2009 (3rd Quarter)	B			
						Start: 2760 + 00	End: 2809 + 00	0.93 Miles	
Subsection Dedtails							Quant.	Cost	
Double Track At-Grade (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		
Double Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		
Double Track Tunnel (Mile)					Start: 2760 + 00	End: 2809 + 00	0.93 Miles		
Double Track Trench (Mile)					Start: 0 + 00		0.00 Miles		
Four Track Construction/Reconstruction At-Grade (Mile)					Start: 0 + 00		0.00 Miles		
Four Track Elevated (Mile)					Start: 0 + 00		0.00 Miles		
Four Track Tunnel (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		
Four Track Trench (Mile)					Start: 0 + 00	End: 0 + 00	0.00 Miles		
1	Intermediate Passenger Stations	Each	\$	-				\$	-
	Intermediate Passenger Stations (Diridon)	Each	\$	119,521,386			1	\$	119,521,386
2	Terminal Passenger Stations	Each	\$	-				\$	-
	Caltrain Passenger Station - At-Grade	Each	\$	15,000,000				\$	-
	Caltrain Passenger Station - On Structure	Each	\$	15,000,000				\$	-
	Caltrain Passenger Station - In Tunnel or Subway	Each	\$	15,000,000				\$	-
	Caltrain Passenger Station - In Trench	Each	\$	15,000,000			0	\$	-
3	Maintenance Facility	Each	\$	123,921,884				\$	-
4	Parking - Structures	space	\$	-				\$	-
5	Parking - At Grade	space	\$	-				\$	-
Rail & Utility Relocation									
1	Single Track Relocation (Temporary)	Mile	\$	2,000,896				\$	-
2	Single Track Relocation (Permanent)	Mile	\$	2,000,896				\$	-
3	Single Track Removal	Mile	\$	130,048				\$	-
4	Major Utility Relocations - Dense Urban	Mile	\$	1,548,288				\$	-
5	Major Utility Relocations - Urban	Mile	\$	1,084,416				\$	-
6	Major Utility Relocations - Dense Suburban	Mile	\$	775,168				\$	-
7	Major Utility Relocations - Suburban	Mile	\$	464,896				\$	-
8	Major Utility Relocations - Undeveloped	Mile	\$	30,720				\$	-
ROW (Not Included)									
ROW required for each segment									
1	Dense Urban	Acre	\$	2,786,321				\$	-
2	Urban	Acre	\$	1,371,510				\$	-
3	Dense Suburban	Acre	\$	908,134				\$	-
4	Suburban	Acre	\$	208,418				\$	-
5	Undeveloped	Acre	\$	3,642				\$	-
ROW required for Temp. Construction Easement									
1	Dense Urban	Acre						\$	-
2	Urban	Acre						\$	-
3	Dense Suburban	Acre						\$	-
4	Suburban	Acre						\$	-
5	Undeveloped	Acre						\$	-
Right-of-Way Required for Stations, Maintenance & Parking Facilities									
6	Dense Urban	Acre	\$	2,786,321				\$	-
7	Urban	Acre	\$	1,371,510				\$	-
8	Dense Suburban	Acre	\$	908,134				\$	-
9	Suburban	Acre	\$	208,418				\$	-
10	Undeveloped	Acre	\$	3,642				\$	-
Environmental Mitigation = 3% Line Costs								\$	7,275,524
System Elements									
1	Signaling (ATC)	Mile	\$	2,070,000			0.93	\$	1,921,023
2	Communications (w/ Fiber Optic Backbone)	Mile	\$	540,000			0.93	\$	501,136
3	Wayside Protection System	Mile	\$	108,000			0.93	\$	100,227
Electrification Items									
1	Traction Power supply	Mile	\$	1,170,000			0.93	\$	1,085,795
2	Traction Power Distribution	Mile	\$	1,485,000			0.93	\$	1,378,125
Subtotal								\$	254,779,300
Program Implementation Costs (per screening)								\$	64,968,722
Program Implementation Costs									
Contingencies (per screening) (25%)								\$	63,694,825
Subtotal								\$	383,442,847
Subtotal (Rounded)								\$	383,000,000